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ABSTRACT

A bilingual, bicultural approach, the Kindergarten Curriculum Guide is intended for all persons involved in teaching American Indian children in either public or Bureau of Indian Affairs Schools. The objective is to establish a broad base of sound principles and philosophy of education for young Indian children with some ideas, experiences, materials, and resources for implementation, from which each school can select appropriate directions, relevant to the particular child, his family and community. The purpose of the guide is to serve as a reference to schools developing their own curriculum. The guide suggests that the teaching method to be employed should stress learning through play and through identification with the teacher rather than through instruction. The 5 areas discussed include (1) early childhood education, such as the articulation of early childhood experiences; (2) creating an environment for learning, such as the planning of use of kindergarten space, the arrangement of equipment and supplies, both indoors and outdoors, (3) curriculum experiences, such as language and concept development, the development of social science, mathematical, and natural and physical science concepts; and experience with music and art materials; (4) supporting services, such as parent involvement in the kindergarten program and bilingual, social service, and health programs; and (5) bibliographical materials, such as books, pamphlets, and films. (FF)

CURRICULUM BULLETIN
No. 5

A KINDERGARTEN CURRICULUM GUIDE

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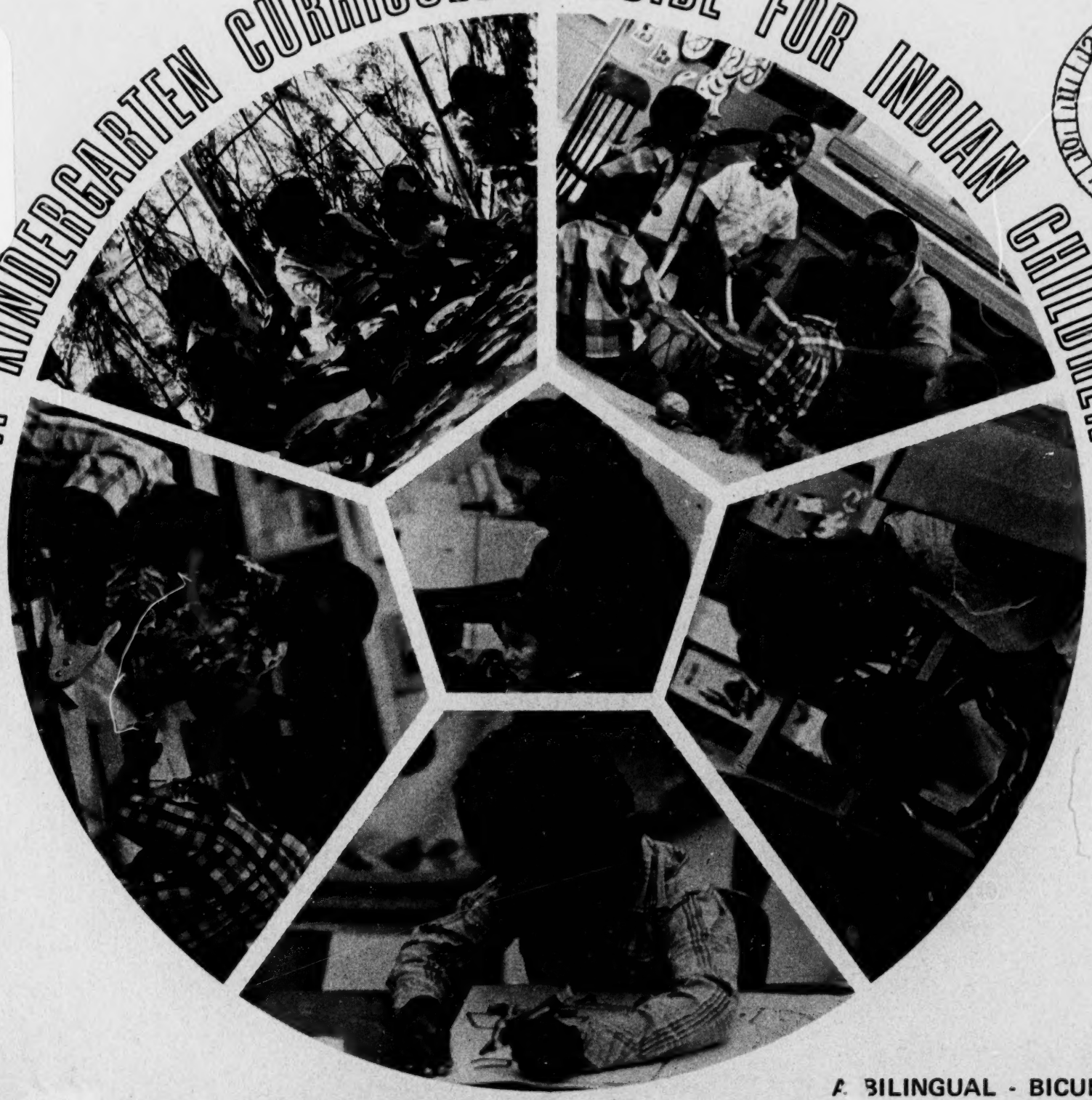

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U. S. BUREAU OF INDIAN AFFAIRS
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Allen Quetone
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William S. King
Acting Director, Education Programs

Thomas R. Hopkins, Chief
Mariana Jessen, Specialist, Early Childhood Education, Editor

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June 1970

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INTRODUCTION

It is our privilege to present to you the Kindergarten Curriculum Guide for American Indian Children.

The result of much planning, evaluation, devising, and revising, the Guide is the product of contributions of those persons responsible for the development of the BIA Kindergartens, now in the second year of operation. The staffs of the National Association for the Education of Young Children drew up the preliminary draft in 1968 and submitted supplementary materials, as did the Bank Street College of Education, as part of the BIA's contract with them for training of personnel. BIA teachers, aides, administrators, together with representatives of parental and Tribal leadership were invited to send suggestions. The staff of the BIA Curriculum Development and Review made substantial contributions as well as Division of Social Services and the U. S. Indian Health Service.

This Guide is presented only as a beginning. It is not to be considered a mandatory course of study. The chief purpose is to establish a broad base of sound principles and philosophy of education for young children with some ideas, experiences, materials and resources for implementation, from which each school is free to move in appropriate directions, relevant to the particular child, his family and community. It is expected that the Guide could serve as reference to the Indian community and schools of each region as they develop their own Guides - as they develop their own curriculum.

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portance. It is a time when the child's experiences may well determine the direction of his future life and learning. It is a time when what happens to him can either stimulate or stifle his future eagerness to learn.

It is our sincere hope that this Guide will be helpful to all those persons who touch the lives of young Indian children and who have concern for their growth and development - wherever they are, in kindergartens enrolling Indian children in public schools as well as in BIA schools.

- Tom R. Hopkins
  Chief, Division of Curriculum Development and Review

- Mariana Jessen
  Education Specialist, Early Childhood Education

THE YOUNG INDIAN CHILD

The wide variations which exist in the cultures and deeply rooted tribal characteristics of the young Indian child are as wide as those of his vast tribal lands; from the endless expanse of the Alaska Arctic, the waving grass lands of the Great Plains, the red rocks and deserts of the Southwest, the smoky hills of North Carolina, to the soft green lands of Mississippi and Florida.

Central to many tribes, however, is the possession of rich sophisticated cultural heritages that include dance, arts, crafts and lore; the view that man is one with nature, living with all things in harmony; and that the land, the "natural" soil, is sacred. Great value is placed on the wisdom of age and experience; language, cultural heritage and close kinship of the large extended family in which the child is deeply cherished, where his early socialization takes place. These values encompass many that we could wish today for modern civilization.

It is from this background that the young Indian child derives great strengths, skills in coping with his environment, great zest for living and learning.

At the same time he can be inhibited in his adjustment to our competitive technological society. Many Indians find themselves in a cultural identity bind. The problem of language is an obvious and immediate example. The majority of Indian children, entering school for the first time, speak little if any English. There is a lack of material, books, stories, films, songs and games based on Indian life available either commercially or within the repertoire of the traditionally trained kindergarten teacher. Concern about the loss of cultural identification together with the isolation of home and school may prevent paren with schools to help the a feeling of adequacy an own and the white cultur curs can he accure the k emotional maturity which significant choices in h

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school may prevent parents from cooperating with schools to help the Indian child achieve a feeling of adequacy and comfort both in his own and the white culture. Only when this occurs can he accure the knowledge, skills and emotional maturity which enables him to make significant choices in his adult life.

Isolated, in vast areas of the reservation, many families find themselves in economic poverty -- some with less than $700 annual income -- the victim with their children, of disease and malnutrition.

The task of the Bureau of Indian Affairs Kindergarten program is to build on the strengths the child brings with him, to keep alive his zest for living and learning, and begin to meet his unfilled needs.

THE BIA KINDERGARTEN

The kindergarten is a day school for five year old Indian children programmed into Bureau schools. The children are transported by their parents or by bus, no more than an hour's trip from home. The daily program, usually of four to six hours, includes large blocks of time for work-play learning experiences, indoor and out, food including breakfast, snack and lunch served family style in the classroom, balanced rest and routines. A teacher and an aide, the teaching team, are employed with each group of 15-20 children. As many teachers as possible and all aides are Indian or native Alaskan, of the community.

- The Kindergarten is the bridge between home and school -- a place where the young child and his family feel comfortable and at home where value is put on <u>him</u>: his culture, <u>his</u> enthusiasm, <u>his</u> drives and interests, where

his zest for living and learning is kept alive and growing, to move out into the wider school and community world, with competence and courage.

- The kindergarten program builds on strengths the child brings with him and extends the base upon which the following years of schooling will rest.

- The kindergarten is his school, a place he wants to come back to each day.

THE AIMS OF BIA KINDERGARTEN EARLY CHILDHOOD EDUCATION PROGRAMS

The Bureau of Indian Affairs aims at the development of an early childhood education program (K-2) available to all reachable five year old Indian children by 1973. The program will provide for:

- an humanistic child development approach to understanding human behavior involving learning and becoming

- strong involvement of parents and the Indian community. The child's greatest potential for growth and learning is within his family. To strengthen the family is to strengthen the child. Their full participation in the kindergarten is essential to bridge the gap in his bicultural education. Ultimately, Indian leaders and parents must become fully involved, with real responsibility and decision making in the education of their young children.

- continuity with the later school years and other programs such as Headstart and Follow Through, capitalizing on gains the children have made in these programs and on the strengths that they bring with them as individuals and by virtue of cultural membership.

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ITS OBJECTIVES:

The ultimate objective of the BIA kindergarten program is to enable each child to:

- become deeply involved and self directive in his learning.
- acquire a positive image of himself as a person and learner.
- grow in terms of his intellectual function, his ego strength, initiative and inventiveness, his relatedness to people and his coping capacity both in adapting to his culture and eventually to help in shaping it.

SIGNIFICANCE OF EARLY LEARNING

A few years back a wise citizen of the world, Brock Chisholm, wrote a challenging book entitled "Can People Learn to Learn?" In this book he posed the urgent question, "Is it possible to develop enough mature people during the next generation that man (will be) prevented from destroying the human race?"

During the past decade or so, we have come to know that if this question is answered affirmatively, we must start educating our very young children. We have also come to know that their education must be rooted deeply and continuously in human values. We know that even before a child is five or six he has formed many attitudes toward himself and his world that will probably spell the difference between his being a positive, affirming person or a negative, denying person.

We know today that what a child learns in his

first five years is not as important as how he feels about what he learns. We know that even a baby may be made neurotic and ill by being force-fed a mental diet that he cannot escape. We know that the most significant teacher a child has is the mother who cares for him during his dependent years.

We know that a child does the most significant learning of his whole lifetime in the first five years. He learns his language, his feelings about himself and his family, his ways of perceiving his world, and his attitudes toward learning.

We know, too, that the most dependable fact about young children is that each is very different from all others - in fact unique. There is only one you in all the world.

Given this knowledge which has been accumulating for the past century at least, some methodologies follow in teaching the very young.

Young children learn through play. Play is a child's most serious and most absorbing business. We must not deny play to the young child or we will later find him experiencing a mental breakdown of some kind. (In fact, eminent students of human behavior feel that many of our serious modern problems are the result of our inability as adults to play.) Most of what a child learns permanently so that it becomes a part of him comes through play.

In this play process a child discovers, he organizes, he classifies, he accepts and he rejects. From his play he develops a concept of his world and, just as he is unique, so is his world unique to him. (Your world and mine are not alike although we may live next door to each other.)

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Our basic method then in the early years (and I define these years as from 2-8) is play - its utilization, its extension, its deepening and its interpretation.

Another aspect of methodology follows from what we know - that young children learn more wholesomely through identification than through instruction. This means then that our passion to instruct, to inform, must be curbed, limited, used sparingly. In its place, we develop a way of being in the play in such a way that a child sees the teacher as one with whom he can identify. From this identification comes rich, meaningful learning. In a bilingual kindergarten being able to speak the mother language is a great asset in encouraging identification.

Finally, our knowledge tells us that the learning of the very young child must involve the total family, especially the mother, if it is to be meaningful and lasting. The involvement of the family in the kindergarten program is as important as the teaching of the child. A child cannot compartmentalize himself at age five and live one life at home, another at school without serious damage to his personality.

The kindergarten program that is being designed for the Indian schools is attempting to implement the foregoing concepts. A significant attempt is being made to bring together, in one setting, the best that is known and to support the program with adequate resources. The Bureau of Indian Affairs has shown great vision in shepherding this program from the drawing board to reality.

- Dr. Mary B. Lane

The Curriculum
of the
Child-Centered
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CONTRIBUTES TO:
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Self-Image
Broadening Interests
Extending Appreciations
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Generalizations
Concepts
The Child's Social Develop
Attitudes
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LEADS TO THE BEGINNING OF:
Permanent Learning
Contributing to school-
family - community -
and the larger world
Economic Competence
Making Wise Choices

TAKES EXPERIENCES FROM:
The Social Studies
Mathematics
The Natural and Physical Sciences
Aesthetic Experiences
art - music - body movements
rhythms

CONTRIBUTES TO:
The Child's Personal Development
Self-Image
Broadening Interests
Extending Appreciations
The Child's Intellectual Development
Knowledge
Understandings
Generalizations
Concepts
The Child's Social Development
Attitudes
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Cooperation
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PROVIDES OPPORTUNITIES FOR:
Language Activities through
Listening - Speaking
Interpreting - Reading -
Dramatization - Role Playing

E ploring - Discovering -
Testing - Classifying -
Categorizing - Generalizing -
Observing - Imitating

Sharing - Trusting
Self-Understanding

THE FIVE YEAR OLD

Although there are individual differences, it should be remembered that five year olds share many common characteristics, whether they are Eskimo children in the Far North, Choctaws in the Deep South, or five year old children anywhere on earth. They want to be grown up. Yet, they are still family centered. They seek affection and support from the persons with whom they feel comfortable and at ease. They are eager to be independent and to assume some responsibility for carrying out home and school tasks. They are beginning to be able to accept a little self-criticism. Feelings are close to the surface, and under stress a five year old may show signs of former infantile behavior. During these times especially, he needs to know that a trusting adult is there to guide and help him.

Fine details in daily routine situations rarely interest a five year old. He washes, dresses, eats and goes to the toilet by himself. However, dirt may remain near his wrists, shirts may be half buttoned, food may be gulped down in large bites or remain on his chin, and he may be so preoccupied with his play that he may have to be reminded to go to the bathroom.

Five year olds are physical beings. They live fully and intensely with their active feet and investigating hands. They seem to have boundless energy. They feel the need to practice repeatedly any newly acquired skills in their own way and at their own pace. Indian children seem to be particularly skillful in their use of small muscles. Their large muscle coordination may not be too well refined in the upper torso region. Each child is intently discovering the power of his own body and the concept of himself as a person.

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This is a period of slow growth. Their bodies are lengthening, and their hands and feet are growing larger. Girls are usually about a year ahead of boys in physical growth. In most children hand-eye coordination may be poorly developed. Most children at this age are farsighted. Handedness has usually been established.

Indian children, like all children, need many concrete, direct experiences. They are grappling with the difference between reality and make-believe. In their individual ways they are trying to find out - how does this work? Why did you do that? Where did it go? When will you come?

In their earnest efforts to comprehend the puzzling world of people and things around them, they learn best through their senses: seeing, smelling, tasting, feeling and hearing. They want information. Many are beginning to use language to express thoughts. A number watch events from the sidelines and absorb meanings in their own way. Their play is purposeful and constructive, though often noisy and vigorous. Most fives like the companionship of other children for they are by and large sociable beings. Friends are important, yet at five, friendships may change quite freely as children attempt to develop ways of getting to know each other. During the first days of school when Indian children are faced with so many new persons, routines, and unfamiliar materials, they may appear unusually quiet and reticent. But as children become more comfortable, they begin to express themselves in new ways and discover new ways of sharing themselves and their materials with others.

Always each five year old needs to know that he is loved, respected, and valued as a person.

ARTICULATION OF EARLY CHILDHOOD EXPERIENCES

The time when the child enters the formalized school program is a beginning of a new experience for him. Yet the child has not lived in a vacuum in his early years. Whether he makes his initial entrance into Head Start, Kindergarten or the Beginners Class, he comes with knowledge, attitudes, and skills already formed within family and community. What he brings with him provides the teacher and staff of the kindergarten with much upon which to develop further curriculum experiences.

Building on what the child brings and extending the base upon which the following years of schooling will rest is fundamental to the kindergarten program. If the child has had a year of Head Start, the kindergarten staff can make some assumption about the child's relative ability to relate to a small group of children and to adults who are not of his family. A concern for extending the ways in which children can help each other and make use of the adult as a resource will become part of the curriculum.

Self-reliance and sharing ideas and skills with other children in appropriate projects will help lay the foundation for the more formal learning experiences he will have in future school years.

The Indian child who comes directly to kindergarten from his home and family needs a bridge which will help him make an easy transition between his two worlds. The curriculum of the kindergarten becomes the keystone of this bridge, whether the child goes into a Beginners class or a regular First Grade. Several ways are available to help the child bridge between his two worlds: (a) the accep-

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tance of parents and siblings in the classroom; (b) the use of the familiar mother tongue to introduce new concepts and give instructions; (c) moving with the rhythm and pace of the particular children in the group; and (d) creating an environment which reflects the culture and using artifacts which are familiar to his natural environment.

The child is moving from one set of experiences to another. Social Studies, Mathematics, Natural and Physical Sciences, Health, Safety and Nutrition, Aesthetic Experiences (Art, Music, Body Movement and Rhythms) all have their rudimentary aspects in the kindergarten. These simple beginnings lead into more complex understandings and skills and the urge to mastery at the individual's own unique level.

THE ROLE OF THE STAFF IN A COMPREHENSIVE EARLY EDUCATION KINDERGARTEN PROGRAM

Staffing patterns vary according to the unique needs of each school community. Despite variations, each staff works together and the members complement one another in a unified way. The most significant complementary relationship arises when there is the opportunity to utilize the children's mother tongue in the living-learning setting because of the presence in each classroom of at least one staff member who speaks the mother tongue.

Usually the following people will be involved in carrying through the comprehensive program.

The Principal
The Teacher
The Teacher-Assistant (Aide)
The Auxiliary Personnel (maintenance, food service, transportation, clerical service)

The Parent and the Community
The Supportive Services Personnel
(health, guidance, psychological and social services)

The coordinated efforts of each person involved influence the probable success or failure of attaining the desired goals. Each staff member has a specific responsibility in line with his position which supports the work of every other member of the staff. For example, the principal is responsible for facilitating the implementation of the total program; the teacher and teacher-assistants are responsible for planning and carrying out the daily activities with the children. The parents and community communicate their concerns and hopes for the education of their children to the school staff and participate in helping to realize their hopes.

AS MEMBERS OF THE SCHOOL, THE KINDERGARTEN STAFF:

1. Work cooperatively with all members of the school staff.
2. Function on educational committees, at local, tribal, and/or state and national levels.
3. Belong to professional organizations.
4. Participate in making decisions about school policy.

AS MEMBERS OF A CLASSROOM TEACHING STAFF, THE KINDERGARTEN TEACHERS:

1. Have a sound philosophy of kindergarten education. Respect play as a child's way of learning.
2. Remember that each child is unique.
3. Are accepting and understanding of all kinds of behavior.
4. Provide a friendly, challenging classroom env
5. Plan appropri group needs.
6. Are imaginati proaches to t
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5. Plan appropriately for individual and small group needs.
6. Are imaginative and creative in their approaches to teaching.
7. Stimulate a child's thinking.
8. Recognize that formal instruction has little or no place in the kindergarten program.
9. Understand the learning process of young children.
10. Understand the local culture of each child and the ways of his people.
11. Help children to inquire, to discover, and to experiment as they learn for themselves.
12. Set realistic standards and limits.
13. Help the child as he grows in independence, self-reliance, initiative, and dependability to assume new responsibility.
14. Help each child to experience some success each day.
15. Foster continued communication between home and school.*
16. Understand that adjustment between home and school is a gradual process.*
17. Encourage positive attitudes for a healthy body.
18. Provide opportunities for aesthetic expression and appreciation.
19. Show consistency in their goals and in the standards they hold for young children.
20. Encourage the use of the mother tongue throughout the school setting.

* See section on Parent Involvement.

A GOOD KINDERGARTEN PROGRAM IS EXPRESSED THROUGH THE KINDERGARTEN STAFF.

AS A PERSON EACH STAFF MEMBER:

1. Has a positive view of self.
2. Knows himself, his abilities, and his limitations.
3. Maintains a high level of curiosity and of sensitivity to the needs of children.
4. Dresses appropriately for the kindergarten activities.
5. Enjoys working with young children.
6. Is open to change and to meet in positive ways the challenges of a new age.
7. Understands kindergarten children's interests and abilities.
8. Is well informed about current changes in education.
9. Gets along well with other people.
10. Has a sense of humor.

AS MEMBERS OF A COMMUNITY THE KINDERGARTEN STAFF MEMBER:

1. Involves the community in the life of the schoolroom.
2. Makes a point of becoming well acquainted with parents.
3. Encourages parents and other interested persons to visit and become involved in the classroom.
4. Interprets the school program to the community in an understandable manner.
5. Is thoroughly familiar with the resources of the community and makes full use of them in the classroom.

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SIZE OF KINDERGARTEN GROUPS

The BIA is committed to the principle that young children learn best in small groups in which there is maximum opportunity for child - staff - parent interaction. For this reason BIA policy and findings of kindergarten groups with a minimum of one teacher and one assistant (aide) is as follows:

morning and afternoon sessions - 15 children each
full session - 15-20 children

Because the children whose parents may want kindergarten experience for them might exceed this number, plans for determining priorities in selection of applicants should be set up by the school in cooperation with appropriate agencies and persons* to help assure quality education for the kindergarten children. These could be the School Board and/or a Parent Advisory Committee.

* See section on Supervision, Objectives and Experiences.

GUIDE FOR TEACHER AND TEACHER-ASSISTANT (AIDE)

The teacher and aide (teacher-assistants) will work together as a team. The teacher will give other staff members clear information and continuous help concerning the children and the program. In many kindergartens it should be remembered that the teacher-assistant may be the only adult who speaks the native language of the children. She is a particularly essential member of the staff. During the first months of the school year she may be the person with whom the children will make their first away-from-home relationship, communicate and seek directions and assistance.

There will be a variety of tasks to do: preparing materials and snacks for the children; assisting with the activities and trips; observing and recording the children's responses to the program, other children and adults; cleaning and repairing equipment; occasionally collecting materials.

There will be specific information about the plan for the day, how supplies and materials are to be used, and what is the procedure to be used in case of an emergency, illness, and accident. Books and pamphlets will provide guidance in understanding your children.

Discussion of the work:

As a teacher-assistant you will be an important staff member. Each task will be a much needed part of the total program and everyone will be expected to complete her share. Teacher-assistants will attend regular staff meetings. It is important at the end of each school day that the teacher and the teacher-assistant talk together and share their observations, notes and experiences concerning the children.

Helpful suggestions during your hours with the children:

Warmth and friendliness with the children are extremely important. Sensitivity to children will make you aware of their needs and will give you clues to the best way of helping them. Do not feel that you must constantly be "doing something" to be useful. It is valuable to spend time watching and listening to children. Conversations with the children are important, but remember not to overwhelm them with too many words.

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Your voice can be a teaching tool. To help a child feel at ease, use a quiet, confident tone of voice, look directly at the child, bend down and give him your attention and interest. If the child wants to sit in your lap, do let him.

The children will feel more comfortable when you are relaxed. Avoid too many quick and sudden moves. As often as you can, sit down on the floor, a low block, or a small chair while talking, reading, singing or working with the children. When the atmosphere is easy and you show enjoyment of the children, a sense of humor and a fairness in setting limits, the feelings in the group will be pleasant. When you are relaxed, the children are relaxed; when you are loud, they are loud, etc.

You should realize that making a mistake is not the worst thing. Learn from the mistake and try not to repeat the error. Rather think of what went right, why it went right, and try to extend it a little more.

Directions or suggestions should be given in a positive rather than a negative way. Tell the child what you want him to do rather than what you do not want him to do. Example: If a child stands on a chair, say to him, "chairs are to sit on, you can stand on the floor." Give the child a choice only when you intend to leave the choice up to him.

When limits are necessary, they should be clearly defined and carried through.

Avoid using such words as "cute," "pretty," "good," "bad," or "naughty" when speaking to children about their behavior.

Avoid motivating a child by making comparisons between one child and another or encouraging competition.

Avoid making models in any art media for the children to copy. Remember that for this age child, the art process rather than the art product is the important thing. They are not able to be interested in drawing or molding "things." It is more appropriate to talk about the colors the child has used or the patterns he has made, or what fun it is to paint than to ask, "What are you making?" or "What is this?"

Treat spills and toilet accidents matter-of-factly. Extra clothes should be in the supply closet.

A child's work should be respected. Give him plenty of time; a warning must always be given before a change of activity or clean-up.

Give a child help when he needs it, do not complete the task for him. Often with a minimum amount of help, he can succeed in becoming more independent.

If you are helping one child, stand or sit so that you can see the rest of the group. Be aware of the whole group. Remember that your responsibility extends beyond the few children with whom you are working.

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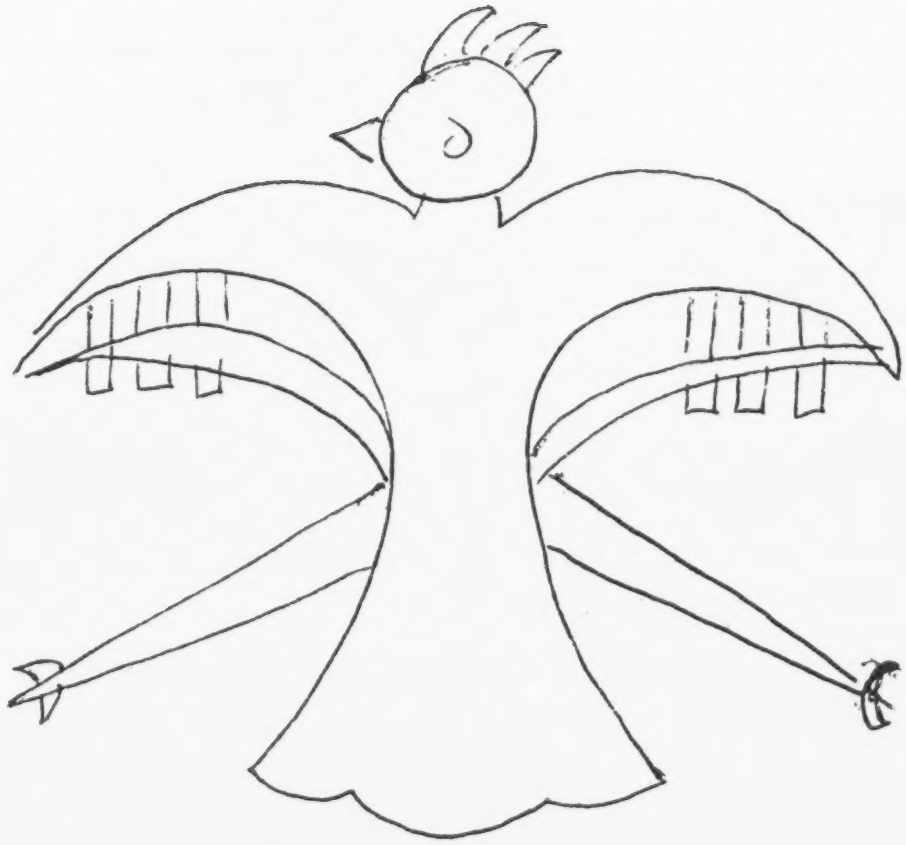

SETTING THE STAGE FOR LEARNING

The people of the teaching team, the child's skilled teacher and co-teacher, (the aide), who work together, who speak his language, are the child's most basic resource for his life away from home. They create the environment and climate for enduring learning, indoors and out:

- where the child feels a sense of trust
- where learning takes place through living and doing throughout the daily cycle of his life, with his mind, feelings and body.
- where teachers understand his thinking and feeling, respond and encourage with a respect which fosters his initiative, self-confidence and creativity.
- where in a relaxed, warm, unhurried atmosphere, indoors and out, there is opportunity through play (the work and language of childhood - his serious efforts to structure reality) for a wide variety of motor and sensory experiences, for active first-hand investigation, for discovery, for stimulation of thought and curiosity, for developing skills of mastery, categorizing, seeing relationships and solving problems.
- where such experiences and activities go on simultaneously in clearly defined "areas of interest"* or "learning centers" set up to provide:
  - creative art experiences with a variety of media, using the natural environment art form;
  - experiences with literature, making his own stories, pictures and books,

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* See Guide for Planning Use of Space

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with special attention to language development, utilizing the child's native tongue, where appropriate, with an experimental approach to the teaching of English;
- experience with sound and feeling of mastery over his body as he moves to music, runs, climbs, balances and slides;
- experiences with relationship and constructural materials, e.g. blocks, puzzles, and a variety of manipulative toys to help develop ideas of space, organization and association;
- exploration of the physical world through simple cooking;
- experiments with water, sand, sun and air, magnetism, through care of pets, plants and other growing things;
- opportunities through dramatic family and community life play and through block building to relearn and recreate home and community experiences - in which he gains knowledge about himself and the world - the basis of social science.

. where, as Dr. Barbara Biber says, "The classroom itself is established as an exercise in thinking if the teachers perceive the possibilities and utilize them. Objects of a common class - blocks, trucks, toy people occupy a common space; to take them out and replace them requires sorting. The whole space is divided into functional areas, establishing a clarity of pathways to goals. The shelf on which the blocks are placed has a picture of a block on the back, telling the first part of the impressive story that for objects there are symbols. Sorting, classifying, symbolizing, action along gradients to-

ward a goal, are repeatedly rehearsed experiences in well-organized classrooms -- lessons without labels."1

- where the child can work and play alone or in small groups, in interest areas of his choice, in ways best suited to his interests, talents and style, where children talk with each other about their work-play and learning is a cooperative enterprise.
- where there is a variety of equipment and materials, the raw stuff to stimulate exploration and discovery, close to the child's concerns and interests within the rich heritage of his Indian culture.
- where total-group activities are kept to a minimum and direct teaching (instruction) is used only with an individual child or a small group when a skill is needed and the learner is ready.
- where, as Ethel Thompson says, "one may have to search for the teachers - who may be at a table doing direct teaching with one, two, three or four children, on the floor as a consultant to a crew of block builders, or at the workbench supporting a piece of lumber a child wants to saw."2
- Dr. James Hymes, well-known authority in Early Childhood Education, has said that he is more concerned about outside space than inside space. Certainly for Indian children, the familiarity and relevance of learning experiences out of doors are of special importance. Here teaching and learning go on in different kinds of situations, calling for different skills, with different methods of problem solving.

1 Dr. Barbara Biber - Challenges Ahead for Early Childhood Education, National Association for Education of Young Children, Washington, D. C.

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. where parents and children become involved in experiences which bring rich learning;
. where learning takes place in extended experiences into the broader world through trips within his school, to his home and community, basic to language development and thought, which he reconstructs in play.
. where food service and nutrition become part of total learning experiences, in pleasant social settings.
. where daily routines become genuine learning experiences as the child cares for himself with feelings of confidence and success.
. where teachers use their knowledge and observation about the child to plan his day so that each part will add up for his total joy and well-being.
. where teachers use their observations to bring to the attention of other members of the kindergarten team any indication of need for additional health, nutritional, psychological, or social services.
. where indoors and out the teaching staff serve as catalytic agents - giving, supporting, trusted persons - guiding the children, interacting, provisioning, and structuring the environment.

2 Ethel Thompson - Kindergarten Education - EKNE, 1201 Sixteenth St., N. W., Washington, D. C. 20036

THE KINDERGARTEN DAY

The structure of the daily program builds upon the teacher's and her staff's understanding that five-year olds learn best through active, sensory participation with a variety of selected experiences with

things, people, and their relationships. Kindergarten children are interested in the concrete, however, with encouragement from the teaching staff, they begin to use language more and more to express their ideas. The teacher uses the children's home backgrounds to weave into the kindergarten program a blend of familiar experiences with supporting materials and a few unfamiliar ones that are introduced at appropriate times.

Programs to be flexible need thoughtful planning, allowing ample time for children to make smooth transitions between activities. Transitions should be planned so that children move naturally from one activity to the next, in small groups. Lining up and waiting should be avoided. Although teachers need to be aware of clock time, it is more important for them to be guided by child time. In order to have children feel free to discover, experiment, and explore, there should be large blocks of time that give them opportunities to work leisurely alone, or in small groups, as they select from the rich offerings of science, music, creative arts, woodwork, puzzles, block building, housekeeping, and books.

All programs, whether half-day or full-day sessions, should include indoor and outdoor work/play activity periods with easy procedures for arrival and departure. For many children, a minimum school day of four hours is long enough. However, the length of the kindergarten day depends upon the needs of the individual child and family.

DAILY PRO

9:00 a.m.

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DAILY PROGRAM (Half-Day Morning)

9:00 a.m.	Children arrive - Teacher's individual greeting. Breakfast served (if necessary).
9:00 a.m. - 10:00	Indoor or outdoor Work/Play Activity Period. Housekeeping play, blocks, carpentry, creative arts, books, story time, puzzles, games, science, water play.
10:00 a.m.- 10:30	Snack. Routine activities Quiet Time.
10:30 a.m.- 11:30	Indoor or outdoor Work/Play Activity Period. Hollow blocks, climbing apparatus, dramatic play (rodeo, trading post, store, fishing, sheep herding, family living); cooking, wheel toys, sand box play, water play, science and nature, music, creative arts.
11:30 a.m.- 12:30	Get ready for lunch and toileting (if necessary) and washing; setting lunch tables, stories, records, music, quiet time activities, lunch.
12:30 p.m.- 1:00	Get ready to go home. Discussion of day's activities. Planning for the next day.

KINDERGARTEN PROGRAM - HALF-DAY
(Afternoon Program)

12:00 - 1:00 p.m.	Getting ready for lunch. Toileting and washing, setting lunch table, eating.
1:00 - 1:30 p.m.	Choice of quiet activities art, materials, puzzles, music, stories.
1:30 - 2:30 p.m.	Outdoor Work/Play activities. Hollow blocks, etc. (See morning schedule).
2:30 - 3:00 p.m.	Snack.
3:00 - 4:00 p.m.	Indoor play activities, etc. (See morning schedule).
4:00 - 4:30 p.m.	Preparation for going home.

DAILY PROGRAM - ALL DAY

9:00 a.m.	Children arrive - teacher greets each individual.
9:00 - 10:00 a.m.	Indoor or outdoor Work/Play activity period. Housekeeping play, blocks, carpentry, creative arts, books, story time, puzzles, games, science, water play.
10:00 - 10:30 a.m.	Snack - Routine activities Quiet time.
10:30 - 11:30 a.m.	Indoor or outdoor Work/Play activity period. Hollow blocks, climbing apparatus, dramatic play, (rodeo, trading post, store, fish-

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11:30- 12:30 p.m. Get ready for lunch. Toileting, washing, setting lunch tables, eating, stories, records, music, quiet time activities.

12:30- 1:30 p.m. Relaxed activities - transition - rest.

1:30- 2:30 p.m. Outside Work/Play activity weather permitting (see morning suggestions).

2:30- 3:00 p.m. Preparation for going home. Discussion of the day's activities. Planning for the next day.

GUIDE FOR PLANNING USE OF KINDERGARTEN SPACE, ARRANGEMENT OF EQUIPMENT AND SUPPLIES, INDOOR AND OUT

(Suggestions for Administrators and Teaching Staff)

The Children's Indoor Area

The children's kindergarten room should be considered their home, indoors, while they are at school, and planned so that the child's living goes on with friends, in familiar surroundings, with suitable, interesting equipment on hand at all times to provide for his total daily activities, such as work-play, rest, routines, and service at meals and snacks.

The physical comfort, the warm friendly atmosphere, and aesthetic quality of the kindergarten, is of great importance in the lives of the children and their families. The soft color of walls with children's work used as decorations, and the uncluttered, orderly arrangement of equipment and furnishings can have lasting influence.

In creating an indoor environment, the equipment and its arrangement can make a significant contribution to the quality of the program for the children and their families, toward accomplishing the objectives of the kindergarten program.

Arrangement

Arrangement of furnishings, equipment and accessory material in orderly, clearly defined areas or zones of interest, is suggestive of activity and invites children to explore, to work and play in small groups or alone; it helps create a stabilizing environment where children and adults feel comfortable and at home.

Such arrangement of equipment and accessory material, in good supply and readily available, helps the child in his learning; to see relationships, organize his ideas, make choices, think, solve problems, and it frees the teacher to give guidance.

Sufficient space should be provided to assure satisfying experiences in each area of activity, such as housekeeping, block building, woodwork, music, creative arts, quiet activities with books, puzzles, games and science experiences, pets, and other growing things. Fifty square feet per child is recommended; thirty-five feet is minimal.

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Within each area of interest the equipment, together with open shelving designed to facilitate the activity and make materials easily accessible to the children, should be arranged so as to suggest its use and relationship, provide for the total process and make it easy for the child to meet success in what he chooses to do.

Playrooms should be arranged so that there is a smooth flow of experiences. There should be a convenient, orderly place for everything, for when play areas are inviting, children will seek them. For three seasons of the year (and now in some schools, four seasons), five days a week, several hours each day, teachers, staff members and children live closely together. To keep the environment stimulating, teachers must make appropriate changes in materials and room arrangement throughout the school year. In the beginning weeks of kindergarten, children need fewer pieces of equipment -- too much too soon can be overwhelming and confusing to five-year olds. Being aware of individual children's interests, teachers can select pictures for the bulletin boards (placed at children's eye level).

Teachers and children can work out "feeling" bulletin boards with materials perhaps of different textures. Science trays can be arranged with nature materials such as seed pods, twigs, or stones. However, part of the old, the familiar, should remain. Children do not outgrow unstructured materials; they discover new ways to use them creatively. The teacher's warm, friendly, accepting attitude toward a child does much to encourage and strengthen his confidence in himself to create.

Some principles to keep in mind when arrang-

ing areas of activity indoors and out, include:

Place things close together that are used together,

Areas of activity requiring close eye work should be placed in best light, out of glare,

Activities requiring most protection from traffic should be placed out of lanes,

Quiet activities should be placed together, and more active ones together,

Area should be arranged to allow for program flexibility, suggest a flow of activity and provide for ease in constant teacher guidance and supervision.

The Children's Outdoor Area

The playground for each kindergarten should be considered their home outdoors while at school. The outdoor area should be planned so that experiences are an integral part of the child's life, where teaching and learning go on -- in different kinds of situations calling for different skills with different methods of problem solving.

Creating a situation for children's growth and development outdoors must be as imaginative and purposeful as for indoors -- and for the same reasons.

Outdoor space that is interesting, with opportunities for adventure, challenge, and wonder in natural environment, should be planned with flexibility and imagination, suitable to different climates.

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Sufficient outdoor space should be provided for a variety of experiences to meet the many needs and interests of children from different backgrounds. Two hundred square feet of outdoor play space per child is optimum, an area of four hundred square feet or a lot equivalent to 50 x 80 feet for a group of twenty children.

Location of Outdoor Play Area

A safe, suitable playground area should be readily accessible to the kindergarten so that play can be interchangeable. It should be well drained and so designed that all parts are easily supervised.

The area should be protected by fencing at least four feet high. A covered area for use in inclement weather is highly desirable. Shade should be provided by trees or awnings; surface should be turf if possible, with one quarter hard surfaced for wheel toys, more if weather conditions make it necessary.

Installation of large climbing and other equipment should conform to safety regulations.

A convenient source of water, located so as to contribute to maximum safety and use, should be provided as a necessary accessory to activities.

Showers or an approved wading pool add immeasurable enjoyment to the program in warm weather. Wading pools should be emptied and cleaned daily.

Arrangement

Equipment and accessory materials, together

with facilities for storage, should be arranged in orderly, clearly defined areas of interest. Sufficient space should be provided to assure satisfying experiences in each area of interest, both active and quiet, such as for climbing and building with challenging things to climb on, large packing cases, ladders, walking boards, and sawhorses; large hollow blocks, kegs, play boards; space for wheel toys to travel; quiet areas for looking at books, digging, gardening, caring for pets, catching light with prisms, or examining a worm; experimenting with water, paints, sand and mud; or just pausing anywhere to feel the wind and watch the clouds. Within each area of interest, storage facilities should be provided, designed to protect and make equipment and ample supplies of accessory play materials easily accessible to the children, according to the same criteria used in setting up areas of interest indoors and to accomplish the same purposes for child growth and development. Additional storage space for seasonal equipment is desirable.

GUIDE FOR SELECTION OF INDOOR AND OUTDOOR EQUIPMENT AND SUPPLIES

(Suggestions for Administrators and Teaching Staffs)

The equipment listed is intended for one group of 15-20 children in a kindergarten, for either a half day or a full day program. Equipment will need careful selection to suit the particular children, their community and their BIA Kindergarten, the size and availability of indoor and outdoor space, climate, etc.

Understanding how children grow and learn is a basic prerequisite to choosing equipment

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and materials. Concrete experiences with materials and equipment and direct experiences with people precede any learning abstractions which will be needed for handling symbols. Children learn:

- -- Through direct experiences
- -- Through active experimentation
- -- Through manipulation
- -- Through their five senses
- -- Through the responses of people.

Children need experiences which:

- -- Stimulate large muscle activity such as climbing, lifting, pulling, pushing
- -- Promote cooperative play
- -- Encourage dramatic play
- -- Encourage language facility and language development and communication
- -- Stimulate expression of ideas and feelings
- -- Foster quiet activities

Equipment, furnishings and materials should be recognized as tools, for the performance of developmental tasks, in daily activities and experiences, that can help the child learn and grow, with feelings of adequacy, accomplishment and joy in himself and his world.

"Things" alone are not adequate teachers or carriers of learning and can never be used as a substitute for the sensitive teaching staff, in the child's imaginative, creative living and learning.

Raw materials and those which children can manage, move and change, such as paints, clay and blocks, contribute more to growth and development and feelings of adequacy and suc-

cess than those fixed, with limited use. Plants and pets to care for, provide opportunities for children to observe and enjoy life processes.

Much equipment can be improvised or constructed, much purchased; much needs to be invented. The most appropriate comes from the ingenuity and interaction of the staff, children and parents living and working together.

It is essential that learning materials be provided that are familiar ("of the family") to the young Indian child, that which is from his world: e.g. cradleboards, sheepskins, brush shelters. hogans, wagons, saddles; books, games, puzzles picturing the community; native crafts - if approved by the community - as well as those which will extend his world.

It is recommended that as far as possible equipment and supplies be constructed by the Indian community and purchased from them.

All equipment must be safe. There must be no sharp edges. Paint on toys must be nonpoisonous. Climbing apparatus is placed on soft dirt, shavings, grass or sawdust. Equipment is constructed simply and carefully.

Equipment should be selected for durability and suitability according to various developmental and age levels, interests and backgrounds of children both as individuals and as a group, and for its adaptability for a variety of uses. It must be the best construction in order to withstand much use, to avoid accidents, and to avoid high repair and replacement expenditures. Variety may be achieved in a program through changing materials frequently. As children's reactions are observed, some materials may be eliminated

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and others introduced. Often a rearrangement of equipment stimulates more constructive activity. Variety in materials and equipment demands sufficient storage space so that the teacher can have "the right things in the right place at the right time".

Equipment, furnishings and accessory material should be plentiful, in good repair, clean and attractive at all times, and a sink or other readily accessible source of water for such activities as housekeeping play, creative arts and science, should be provided. Materials are introduced as appropriate.

Furnishings, such as tables, chairs, low open shelving, individual lockers for belongings, light stackable cots and accessory equipment for play and food service, should be accessible, appropriate in size, and designed to assure the developmental needs, comfort, health and safety of each child in his daily living.

Adequate accessible storage space should be provided for cots, extra supplies, emergency clothing and for teachers' belongings.

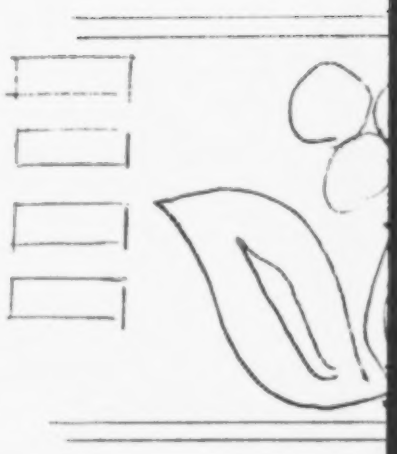
Equipment, useful in an outdoor environment where there is greater opportunity for vigorous activity and contact with the physical world, may differ from that developed for indoors, but the basic purposes, criteria for selection and arrangement, remain the same.

<u>INDOOR EQUIPMENT BY AREA OF INTEREST</u> (Much is interchangeable with outdoor)

<u>BLOCK BUILDING AREA</u>

Blocks are put at the head of the list for meeting young children's learning and de-

velopmental needs by most experienced teachers. Through use of blocks some of the skills developed and needs met include:



- Visual perception
- Skill in classification and categorizing
- Social skills in adjusting child's needs to others, in exchanging ideas
- Opportunity for self direction
- Development of spatial numerical concepts (mathematics beginning)
- Development of language skills as needs expressed, achievements explained
- Development of eye-hand coordination
- Opportunity for dramatic play, planning, creating, reliving experiences, mapping, for seeking information for dramatic play in books, "a reading readiness and social studies program."

Hardwood blocks with natural finish give the best and longest service. The basic block has proportions of 1:2:4. All others are either multiples or divisions of the unit related to it in width, thickness and length. A unit block measures 1 3/8 in. x 2 3/4 in. x 5 1/2 in.

Equipment: Quantit

Solid unit blocks

Unit	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	110 to
Half unit	1 3/8 in. x 2 3/4 in. x 2 3/4 in.	70 to
Double unit	1 3/8 in. x 2 3/4 in. x 11 in.	156 to
Quadruple unit	1 3/8 in. x 2 3/4 in. x 22 in.	120 to
Small pillar	1 3/8 in. x 1 3/8 in. x 2 3/4 in.	24 to
Large pillar	1 3/8 in. x 1 3/8 in. x 5 1/2 in.	12 to
Small column	1 3/8 in. diameter x 5 1/2 in.	16 to
Large column	2 3/4 in. diameter x 5 1/2 in.	16 to
Small triangle	1 3/8 in. x 2 3/4 in. x 2 3/4 in.	24 to
Large triangle	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	24 to
Quarter circle curve	1 3/8 in. x 2 3/4 in. x 7 3/4 in.	12 to

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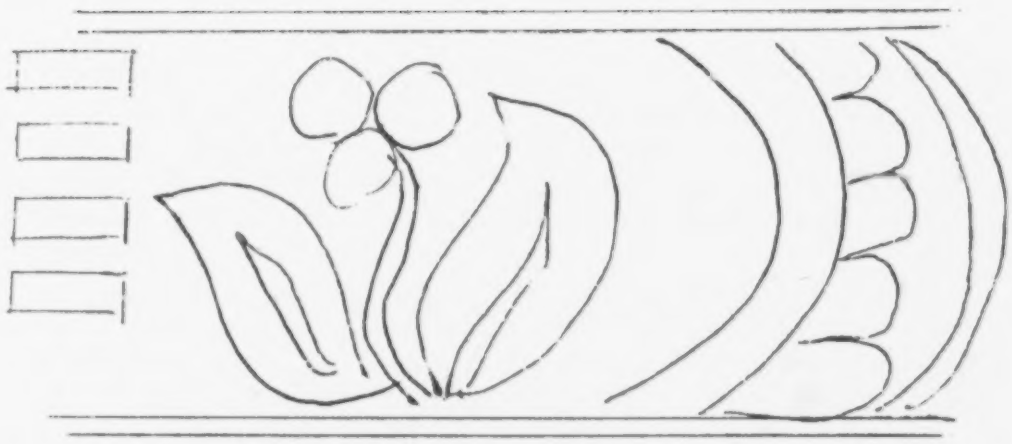

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	Quantity
8 in. x 2 3/4 in. x 5 1/2 in.	110 to 200
8 in. x 2 3/4 in. x 2 3/4 in.	70 to 80
8 in. x 2 3/4 in. x 11 in.	156 to 200
8 in. x 2 3/4 in. x 22 in.	120 to 180
8 in. x 1 3/8 in. x 2 3/4 in.	24 to 40
8 in. x 1 3/8 in. x 5 1/2 in.	12 to 16
8 in. diameter x 5 1/2 in.	16 to 24
4 in. diameter x 5 1/2 in.	16 to 24
8 in. x 2 3/4 in. x 2 3/4 in.	24 to 30
8 in. x 2 3/4 in. x 5 1/2 in.	24 to 30
8 in. x 2 3/4 in. x 7 3/4 in.	12 to 16

Elliptical curve	1 3/8 in. x 2 3/4 in. x 13 3/4 in.	12 to 16
Quarter circle	1 3/8 in. x 2 3/4 in. x 2 3/4 in.	8 to 20
Half circle	1 3/8 in. x 1 3/8 in. x 2 3/4 in.	4 to 8
Small buttress	1 3/8 in. x 1 3/8 in. x 4 in.	8 to 14
Large buttress	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	4 to 8
Ramp	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	12 to 16
Large switch	1 3/8 in. x 8 1/4 in. x 11 in.	4 to 6
Small switch	1 3/8 in. x 5 1/2 in. x 8 1/4 in.	4 to 8
Arch	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	4 to 8
Half arch	1 3/8 in. x 2 3/4 in. x 5 1/2 in.	4 to 8
Roof board	3/8 in. x 2 3/4 in. x 11 in.	32 to 40
Floorboards	3/8 in. x 2 3/4 in. x 22 in.	20 to 30
Total 23 shapes		700 to 1,022

3 Storage shelves 48" x 38 1/4 in. x 12 in. divided in sections.

Supplies: Accessories, Basic

	Quantity
Miniature family, community figures, including doctor and nurse, animals (appropriate to locale), wood or rubber	2 dozen or more
Boats, airplanes, trucks, cars, buses, wagons, (appropriate to locale, scaled to unit block size)	8 to 10 of each
Interlocking trains (wood)	2 sets
Miniature train and track set (Skanealtes)	1 set
Color cubes	Box of 100
Material, solid colors, washable, 1 yard square	4 - 5
Heavy twine, string	Several lengths

Additional Accessories[1].

Samples of tiles, linoleum squares, rugs. Children like to cover floor areas and walls of buildings with them, and enjoy making decorative patterns.

Shells, such as scallop or clam shells: they can be used for "plates" when a child builds a restaurant (with food made of plastecene); or again for decorative purposes.

Pebbles, small stones, little sticks for "cargo" on trains, boats and trucks. Children can collect these on walks to a nearby park.

Variety of small containers. They come in handy for all sorts of things, such as keeping "money" in a "store", providing water for animals in a farm or zoo, etc.

Variety of lumber scraps, especially flat pieces for roofs, wide bridges, etc.

Furniture. Very simple furniture can be made at the woodworking bench. (Commercially bought furniture is either very expensive or very flimsy!) Children, however, should also be shown how to improvise furniture out of the blocks themselves.

Familiar signs such as "one way," "stop", "school crossing", "bus stop", etc.

Popsickle sticks (for attaching signs, for making fences - they will stand up if stuck into a small piece of plastecene).

Thin pieces of rubber tubing. Tacked to a cylinder block, you can make a simple gas pump. Children will think of other uses.

Excelsior makes good hay for farm animals.

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Red, white, or black beans put into plastic pill containers can serve as medicine in a hospital. (Colored water in small bottles is also popular for this purpose.) Be sure to have scraps of fabric so children can cover the patients lying in bed!

Trees can be made very simply: let the child draw a tree, cut it out, then staple it to a popsicle stick and stick it into a piece of plastecene so it will stand up.

Pulleys, with ropes and containers, make wonderful "elevators".

Drycell batteries with lights are most popular with 5 year old boys.

Any old piece of machinery, especially if it has switches, or knobs that turn, can be placed in the blockcorner. An old TV antenna, e.g., or a broken clock, earphones or radio, will be used by the children in countless ways.

Save magazine pictures of bridges, roads, constructions, city scenes and mount them on shirtboards or oaktag. Have them available for individual children who may need clarification when reconstructing something they have seen. Display them on the walls of the block area if your layout permits this.

Children love to have signs written for their buildings. If these signs can be saved and stored in a simple manner, they can be used again and children may begin to recognize some of them. This is an excellent pre-reading activity.

Five-year olds are very capable and independent. If manilla and colored construction paper, a few crayons, scissors, masking tape,

and string are always available in or near the blockcorner, the children will begin to make their own signs, draw trees, people and other things they need, and use their imagination in a constructive, purposeful way.

Note: The above list is meant to be simply suggestive. Obviously, no teacher will ever put all these accessories out at once. However, the larger your supply of odds and ends, the better you will be able to help the children in the blockcorner when they begin to need accessories for specific purposes.

1 Blockbuilding - Maja Apelman, Bank Street College of Education.

MUSIC RHYTHMS DANCE AREA

Equipment:	Quantity
Drums	2
Record player	1
Records, carefully selected	25-30
Rack for records	1
Open shelving, 12" x 30" x 48"	

Supplies:

Improvised instruments (see Louis Ballard "Music Education Syllabus")
Materials for Rhythms (see Miriam Stecker "Rhythmic Movement as a Tool for Learning")

WOODWORKING AREA

Working with wood and simple tools with adequate supervision will provide experiences which help children to develop hand-eye coordination. Wood is also an art medium and

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ditional creat

Equipment:

Work bench 22"
Tool board
Table 21" x 24

Tools:

Brace, ratchet
Bits, 1/4", 1/
Hammer, carpen
Hand file, med
Pliers, 6"
Saw, 16" cross
Screwdriver, f
Square, Tri 6"
C Clamp 4"
Open shelving

Supplies:

Nails, assorte
Wood, soft pin
1/2" x 1/2" x
6" x 1/2" x 3
2" x 2" x 36"
Wire
Roofing tins
Wheels
Muffin tins fo
Magnets
Screws
Dowels - assor
Carpet tacks (
Corks
Cup hooks (box)
Rope and strin
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Maja Apelman, Bank Street
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alone as with other materials can provide additional creative experiences.

Equipment:

	Quantity
Work bench 22" x 42" top	1
Tool board	1
Table 21" x 24" x 24"	1

Tools:

Brace, ratchet	1
Bits, 1/4", 1/2"	1 each
Hammer, carpenter's 13 oz.	3
Hand file, medium	2
Pliers, 6"	2
Saw, 16" crosscut	2
Screwdriver, flat 1 1/4"	3
Square, Tri 6"	1
C Clamp 4"	2
Open shelving 12" x 30" x 48"	1

Supplies:

Nails, assorted sizes	10 lbs or more
Wood, soft pine in assorted sizes: 1/2" x 1/2" x 36"; 1"x 1/2" x 36"; 6" x 1/2" x 36"; 1" x 1" x 36"; 2" x 2" x 36"; 4" x 1/2" x 36".	Several
Wire	4 balls
Roofing tins	400
Wheels	2 gross
Muffin tins for nails, etc.	4
Magnets	4
Screws	10 dozen
Dowels - assorted sizes	4 dozen
Carpet tacks (box)	8
Corks	40
Cup hooks (box)	48
Rope and string, pieces of leather for hinges	

Paint brushes 1"wide	12
Ice Tea holder with paint jars, for painting woodwork	
Sandpaper (Assorted)	
Elmer's glue	
Dust pan	1
Hand brush, broom	1 each
Aprons to protect children's clothing when painting woodwork	2

HOUSEKEEPING AND FAMILY LIFE PLAY AREA

Play in a housekeeping area enables children to clarify, organize, and practice understandings of what they see and hear in their own environment. Such play is their way of working to understand the roles of men and women as children "bathe the baby", "deliver the milk", "go shopping", or pretend to be the doctor. Language skills flourish, a sense of order can develop, and self-direction and leadership can take place in the housekeeping area. Social studies concepts of self and community are clarified.

Equipment:	Quantity
Bed, doll Cradle, doll	1 each
Carriage, wood	2
Dish Cabinet	1
Dress Up Unit with Mirror	1
Ironing Board and Iron	1 each
Sink, with large water container, drainboards, shelves for water play	1
Stove, play	1
Table 21" x 24" x 36"	1
Chairs, stacking 12"	4

Supplies: Accessories

For real and play cooking, serving, dishwashing, cleaning, etc. all sturdy, life size (also see cooking)

Plates, cups, sa
forks, spoons
Kettle, creamer,
Plastic mixing b
Serving bowls
Colander, coffee
ladle
Baking tins
Frying pan
Cookie cutters
Towel rack
Egg beaters
Rolling pins
Wooden spoons
Measuring cups a
Small plastic co
dough, etc.
Muffin tins
Double boilers,
Cookie Sheets
Dish cloths
Dish towels
Sponges, brooms,
Plastic aprons,
Tablespoons
Large saucepan 4
Small saucepan 1
Can opener, vege
Paring knife, bu
strainers-large
Potholders
Rubber spatula

Doll Play:

Dolls (Indian a
Baby, washable,
Wash cloths
Soap dish
Towels
Plastic aprons t
Blanket, doll
Doll nursing bot
Doll clothes

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Plates, cups, saucers, knives, forks, spoons	6 each
Kettle, creamer, sugarbowl	1 set
Plastic mixing bowls and basins	4
Serving bowls	4
Colander, coffee pot, saucepan, ladle	1 each
Baking tins	2
Frying pan	1
Cookie cutters	12
Towel rack	4
Egg beaters	4
Rolling pins	4
Wooden spoons	6
Measuring cups and spoons	2
Small plastic containers for salt, dough, etc.	4
Muffin tins	2
Double boilers, sifters	2 each
Cookie Sheets	4
Dish cloths	6
Dish towels	4
Sponges, brooms, mops, dustpans	2 each
Plastic aprons, to protect clothing	4
Tablespoons	6
Large saucepan 4 quart with lid	1
Small saucepan 1 quart with lid	1
Can opener, vegetable peeler	1 each
Paring knife, butcher knife, strainers-large and small	1 each
Potholders	4
Rubber spatula	3
Doll Play:	
Dolls (Indian and other)	
Baby, washable, older	
Wash cloths	4
Soap dish	1
Towels	6
Plastic aprons to protect clothing	2
Blanket, doll	2
Doll nursing bottle	6
Doll clothes	Assorted

Dress Up (Including for male role)

Lengths of material (sq. yd.) washable cotton	6
Shoes, hats (for men and women)	Several
Stethoscope	2
Pocket books	Several
Kits of supplies used by fathers in work	Several
Shoe shine box	1
Jewelry	Assorted
Telephones	2
Shopping bags, neck ties, lunch boxes	

LANGUAGE AND LIBRARY AREA

A quiet, attractive area with a small table and chairs, a library rack or open book shelves with inviting books available to the children provides a foundation for interest in reading. The young child needs to handle books, linger over them, look at the pictures, figure out the story sequence from the pictures, and retell the stories to himself. It is a daily need for children to listen to stories in small groups that the teacher or aide or volunteer reads. Children begin to understand that we all learn from books, that we read from the left to the right, that we can guess about the story from pictures and that reading is pleasurable and exciting.

Equipment:	Quantity
Tape recorder	1
Typewriter	1
Listening post and headsets	1
Telephones	2
Record player	1
Library display rack	1
Projector	1
Round table and 2 chairs 12"	
Rocking chairs	1

Camera, Polaroid

Books and pictures
ted and the content
experiences and int
and illustrated by
working together.

MANIPULATIVE AND QU

Each child needs som
ties, sometimes alo
group. It may be w
at a book or playin
materials aid child
hand coordination,
and in visual perce

Equipment:

Tables
Chairs stacking 12"
Open shelving 12" x

Supplies:

Manipulative materi
games:
Picture lotto games
other subjects rel
experience)
Puzzles, wooden inl
lated to child's e
20 pieces
Form boards
Puzzle rack
Hand puppets
Nuts and bolts
Pipe fittings, 3/4"
tees, unions, 4" a
Flannel board, with
flannel
Hole puncher

or male role)	
sq. yd.) washable	6
and women)	Several
	2
	Several
by fathers	
	Several
	1
	Assorted
	2
ies, lunch boxes	

AREA

rea with a small table
rack or open book shel-
ks available to the chil-
ation for interest in
hild needs to handle
em, look at the pictures,
sequence from the pic-
stories to himself. It
hildren to listen to stor-
hat the teacher or aide
Children begin to under-
rn from books, that we
the right, that we can
from pictures and that
e and exciting.

	Quantity
	1
	1
adsets	1
	2
	1
	1
	1
irs 12"	
	1

Camera, Polaroid	1

Books and pictures should be carefully selected and the content related to the children's experiences and interests. Many can be made and illustrated by the children and teachers working together. 50-80

MANIPULATIVE AND QUIET ACTIVITIES AREA

Each child needs some time for quiet activities, sometimes alone and sometimes in a small group. It may be working a puzzle or looking at a book or playing with hand puppets. Such materials aid children in development of eye-hand coordination, in spatial relationships, and in visual perception.

Equipment:	Quantity
Tables	2
Chairs stacking 12"	8
Open shelving 12" x 30" x 48"	2

Supplies:	
Manipulative materials, table games:	
Picture lotto games (animals and other subjects related to child's experience)	4
Puzzles, wooden inlay (subject related to child's experience) 12 to 20 pieces	10-12
Form boards	6-8
Puzzle rack	1
Hand puppets	Set of 5
Nuts and bolts	15-20
Pipe fittings, 3/4" pipe, elbows, tees, unions, 4" and 6" nipples	Assortment
Flannel board, with pieces of flannel	1
Hole puncher	1 or 2

Scraps of different colors and textures, e.g., fur, wool, velvet, etc.	
Miniature furniture and family sets	2 each

SCIENCE AREA

Equipment:	Quantity
Aquarium	1
Terrarium	1
Cage for animals	1
Open shelving 12" x 30" x 48"	

Supplies:	
Magnifying glass	4
Magnets, horseshoe, bars, each	4
Prisms	2
Dry cell batteries	4
Bell, light, switch	2-4
Balance board with fulcrum about 6" high	1
Balance scale 1 or 2 oz. weights	1
Large thermometer	1
Flower pots (small)	1 per child
Seeds and bulbs	Assorted
Watering can	1
Water play - corks, wood, small boats	Assorted
Large and small funnels	2 or 3
Rubber tubing 1/2"	3 ft. (approximately)
Measuring cup	2 or 3
Fish and turtles	2 or 3
Animals, pets	Several
Photography tray, (large) plastic	1

CREATIVE ARTS AREA

Most early learnings are related to children's sensory experiences. Painting, making dough, or molding clay provides sensory and creative satisfaction to children as well as relieves

ent colors and tex-
, wool, velvet, etc.
ure and family sets 2 each

	Quantity
	1
	1
	1
' x 30" x 48"	
	4
be, bars, each	4
	2
es	4
ch	2-4
th fulcrum about	
	1
or 2 oz. weights	1
r	1
11)	1 per child
	Assorted
	1
ks, wood, small	
	Assorted
funnels	2 or 3
2"	3 ft. (approximately)
	2 or 3
	2 or 3
	Several
, (large) plastic	1

EA

ings are related to children's
ces. Painting, making dough,
provides sensory and creative
children as well as relieves

tension. Language skills, manipulative skills, and social skills are by-products of art experiences. The purpose of art with young children is experimentation, discovery, the creative experience itself, the process - not a finished product.

Equipment:	Quantity for 9 months approx.	
Easel, paint, double	2	2
Rack for drying children's painting	2	1
Tables 21" x 24" x 36"		2
Chairs stacking 12" high		8
Open shelving, 2 units each 12"x 30" x 48"		2

Supplies:	
Paints, Tempera, dry, red, blue, green, yellow, black, white, brown, purple, turquoise, orange.	20 cans of red, blue, green, yellow, 12 cans of remainder
Finger paint (can be made with starch and tempera paint)	2 cases liquid starch
Brushes, long handle, sturdy, 1/8", 1/2", 1/4", 3/4".	18 or more

Collage material: odds and ends of cellophane tinfoil, feathers, ribbons, lace, wallpaper, cloth, cotton, felt	Vari
Clay boards (if top of table not used) - masonite	8 o
Paste (can be made)	6 qu
Crayons (1 dozen box) 3/8" diameter	20
Easel paper, ream (newsprint)	8
Glazed shelf paper 16" x 22"	4 ro
Manila paper - 9" x 12" (1 ream) pkg.	16
12" x 18" (1 ream) pkg.	4
Construction paper (Color) 9" x 12" (100 sht. pkg)	14
12" x 18" (100 sht. pkg)	22 1
Finger paint paper (if used)	5 pk
Pipe cleaners (colored assorted sizes)	6 bo
Brown paper (Project roll 24")	3/3
Potter's clay (50 lb. can)	200
Tongue blades	1 bo
Sponges (for cleaning up)	4 do
Soap flakes (Ivory Snow or Flakes, Tide)	2 do
Food cloring - red, blue, green, yellow	1 pi
Paper punch	2
Plastic paint jars with covers	32
Plastic clay pail with cover	1
Plastic containers for finger paint	6
Plastic containers for paste	4
Scissors 6" pointed	12
Scissors (teacher)	1
Colored chalk (large)	2 gr
Crayons	12 b
Magic markers - red, green, blue, black, organe, purple, brown	4 of

s and ends of cellophane	
ribbons, lace, wallpaper,	
t	Variety
table not used) - masonite	8 or 12
	6 quarts
3/8" diameter	20
sprint)	8
x 22"	4 rolls
" (1 ream) pkg.	16
" (1 ream) pkg.	4
lor) 9" x 12" (100 sht. pkg)	14
12" x 18" (100 sht. pkg)	22 1/3
used)	5 pkgs.
assorted sizes)	6 boxes
oll 24")	3/3
can)	200 lbs.
	1 box (500)
up)	4 dozen (2/3 case)
w or Flakes, Tide)	2 dozen boxes - large size
ue, green, yellow	1 pint of each color
	2
h covers	32
cover	1
finger paint	6
paste	4
	12
	1
	2 gross
	12 boxes
reen, blue, black, organe,	
	4 of each color

MISCELLANEOUS

Supplies:	Quantity
Scotch tape, narrow	2 dozen rolls
Masking tape	4 dozen rolls
Stapler and staples	1 per room
Plastic mending tape, 1/2" red, brown, blue, green	3 dozen of each color
Shelf hooks	1 dozen cards (24)
Kleenex	1 case
Thumb tacks	6 boxes per room
Rubber bands	6 boxes per room
Tacks	3 pdgs. per room
Brown paper bags	100
Paper clips	6 boxes, large; 6 boxes,
Yard stick	1 per room
Rulers	3 per room
Tagboard, assorted colors	50 per room
Yarn	Sufficient

FURNITURE AND OTHER EQUIPMENT (also included in Interest Areas

Equipment:	
Basket, waste - round	4
Blanket, cotton, (for full day, one session, with cots for 20 children)	30
*Blender, Osterizer (for children's cooking experiences)	1
Bulletin Board	1
*Cabinet, storage, open shelving, 2 units each, 12" x 24" x 48", (for creative arts, quiet activities, woodwork, music, housekeeping areas)	
Where shelving is built in along one wall	3 units
If not	5 units
Cabinet, file, 2 drawer, locked	1
Cabinet, teacher's storage unless built in (for personal belong-	

Quantity

2 dozen rolls
4 dozen rolls
1 per room
" red,
3 dozen of each color
1 dozen cards (24)
1 case
6 boxes per room
6 boxes per room
3 pdgs. per room
100
6 boxes, large; 6 boxes, small
1 per room
3 per room
50 per room
Sufficient

NT (also included in Interest Areas and Curriculum Experiences)*

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ings, extra supplies)	1
*Camera, Polaroid, including wide lens attachment	1
*Chair, rocking, child (2 for housekeeping area, one for library book area)	3
Chair, rocking, adult	1
Chair, stacking, 12"	20
*Chair, stacking, 18"	4
Cots, aluminum stacking (if full day, one session, 20 children, provide sheets also	22
*Hot plate - 2 burner, electric skillet, coaster, over rotisserie, refrigerator, small with ice cube maker, electric (for children's cooking experiences in their room)	1 each
*Library unit (for book area)	1
*Projector, slide (if not available in school)	1
Rug, 15' x 12' (depending on size of classroom	1
*Storage shelves (for blocks) 48" x 38 1/4", divided into sections	3
Storage unit (lockers) 45" x 48" x 15" (to be placed in corridor if possible, for children's clothing and treasures) 4 unit	5
*Table, 21" x 24" x 36" (2 for creative arts; 2 for quiet activities, science; 1 for housekeeping areas)	5
* *Table, round, 30"-60" diameter, 21" high for library-book area	1
*Tables, 21" x 24" x 24", for food service, housekeeping area, other creative needs	2

OUTDOOR, AREAS (One outd
be used alternatively by
dren.)

EQUIPMENT AND SUPPLIES I

For example, saddle, s
brush shelter, wagon, ou
horses, etc., natural ro
climbing

CLIMBING AND BUILDING

Equipment:

Barrels, Keg 10" x 14"
Blocks, large, hollow,
with boards, set

Boards, walking, heavy
with cleats, 6'
Climber, junior arcade
Ladder, 4' x 13', alum
Sawhorses, 24" high x 2
aluminum or wood
Native rocks, logs, tre
Swings, of rubber tires

Supplies:

1 1/2 yard length of ma
colors: black, red, b
orange washable cotto

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needs

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	1
	3
	1
	20
	4
	22
	1 each
	1
	1
	1
	3
	5
	5
	1
	2

OUTDOOR, AREAS (One outdoor playground can be used alternatively by two groups of children.)

EQUIPMENT AND SUPPLIES INDIGENOUS TO CULTURE

For example, saddle, sheep skins, hogan, brush shelter, wagon, outdoor oven, stick horses, etc., natural rocks, logs, trees for climbing

CLIMBING AND BUILDING

Equipment:	Quantity
Barrels, Keg 10" x 14"	8
Blocks, large, hollow, wood, with boards, set	28 squares; 16 double squares; 16 half squares; 4 ramps 8 boards 5/8" x 22"; 8 boards 3/4" x 5 1/2" x 44"
Boards, walking, heavy duty with cleats, 6'	6
Climber, junior arcade	1
Ladder, 4' x 13', aluminum	5
Sawhorses, 24" high x 24" wide, aluminum or wood	8
Native rocks, logs, tree trunks	Several
Swings, of rubber tires	3 or 4

Supplies:

1 1/2 yard length of material of solid colors: black, red, blue, green, yellow, orange washable cotton

Train signals
Caps - engineer, fireman, cowboy
Lengths of rope
Large tube (for gas)
Dowel sticks for pieces of material
Bells attached to wood
Wheel (steering)
Ticket punch - paper for tickets

SAND PLAY

Equipment:

Sand pit, 15' x 15'
Storage for sand toys

Supplies:

Sand
Interlocking trains
Tug boats (flat bottom)
Roofing boards, flat
pieces wood, assorted
shapes and sizes
Sieves
Strainers, heavy colored
plastic
Colanders, heavy colored
plastic
Jello molds
Muffin tins
Sugar scoops
Pails and shovels
Wooden bowls and spoons
Butter molds (big)
Painted cans
Pots and pie pans

HOUSEKEEP

Supplie

Clothes
Line
Soap (c
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Dolls
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SCIENCE,

Equipme

Wooden
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Magnets
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Books
Musical
Bells,
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Others,

WATER PLA

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Lengths
Funnels
Boats,
Corks
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Straws
Cans wi
Large

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HOUSEKEEPING AND LAUNDRY

Supplies:

Clothes pins
Line
Soap (cake)
Material to wash, and to wrap dolls in
Dolls
Tubs and washboards
Waterproof aprons

SCIENCE, QUIET ACTIVITIES, MUSIC

Equipment and Supplies:

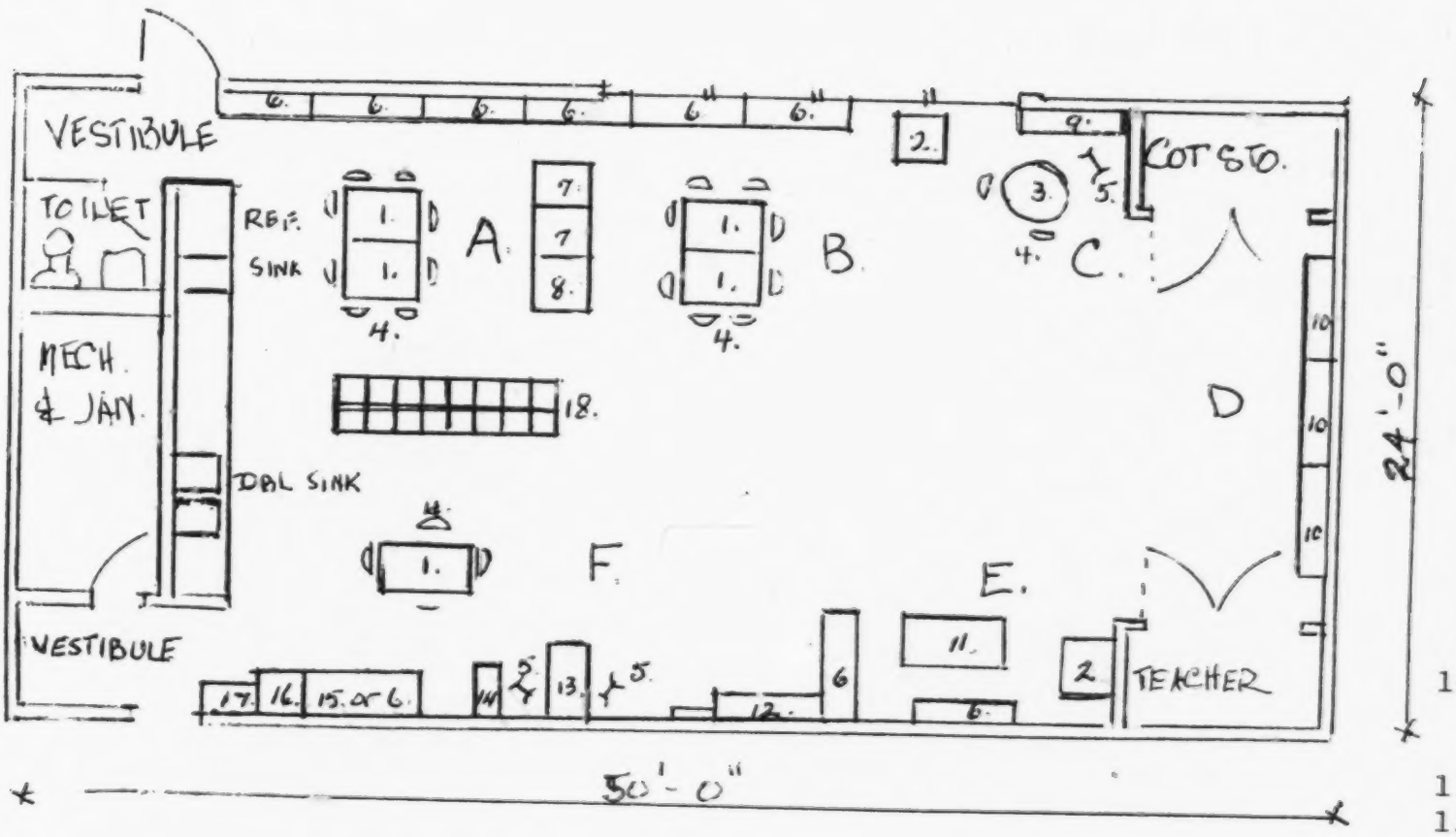
Wooden box with top
Prisms
Magnets, nails, screws, locks
Magnifying glass
Jars for worms, flies, butterflies, etc.
Small net to catch them with
Binoculars
Blanket
Books
Musical Instruments
Bells, Big drum
Tuning fork
Others, improvised

WATER PLAY, EXPERIMENTAL

Supplies:

Lengths of tubing or hose (different sizes)
Funnels (different sizes)
Boats, small (in box)
Corks
Wood
Straws for blowing bubbles
Cans with holes punched in bottom
Large tubs

ONE ILLUSTRATION OF PRINCIPLES, IN PLANNING USE OF SPACE AND ARRANGEMENT OF EQUIPMENT AND SUPPLIES, INDOORS



FLOOR PLAN
1/8"=1'=0"

AREAS

A. C
B. S

C. L
D. B
E. W
F. H

EQUIP

1. T
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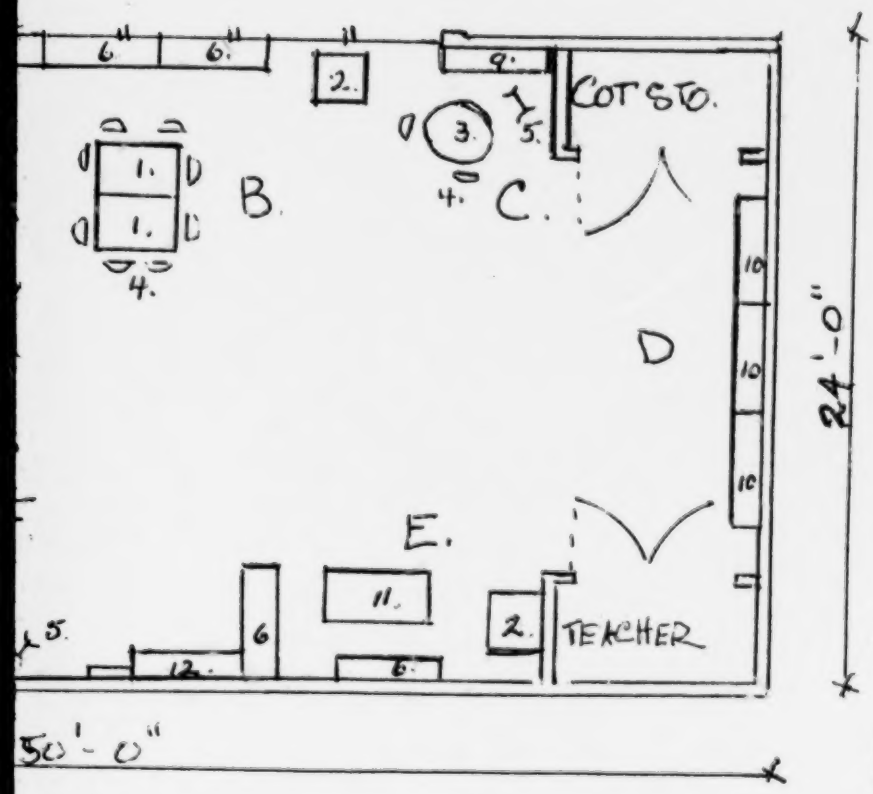
S, IN PLANNING USE OF SPACE
AND SUPPLIES, INDOORS



AREAS

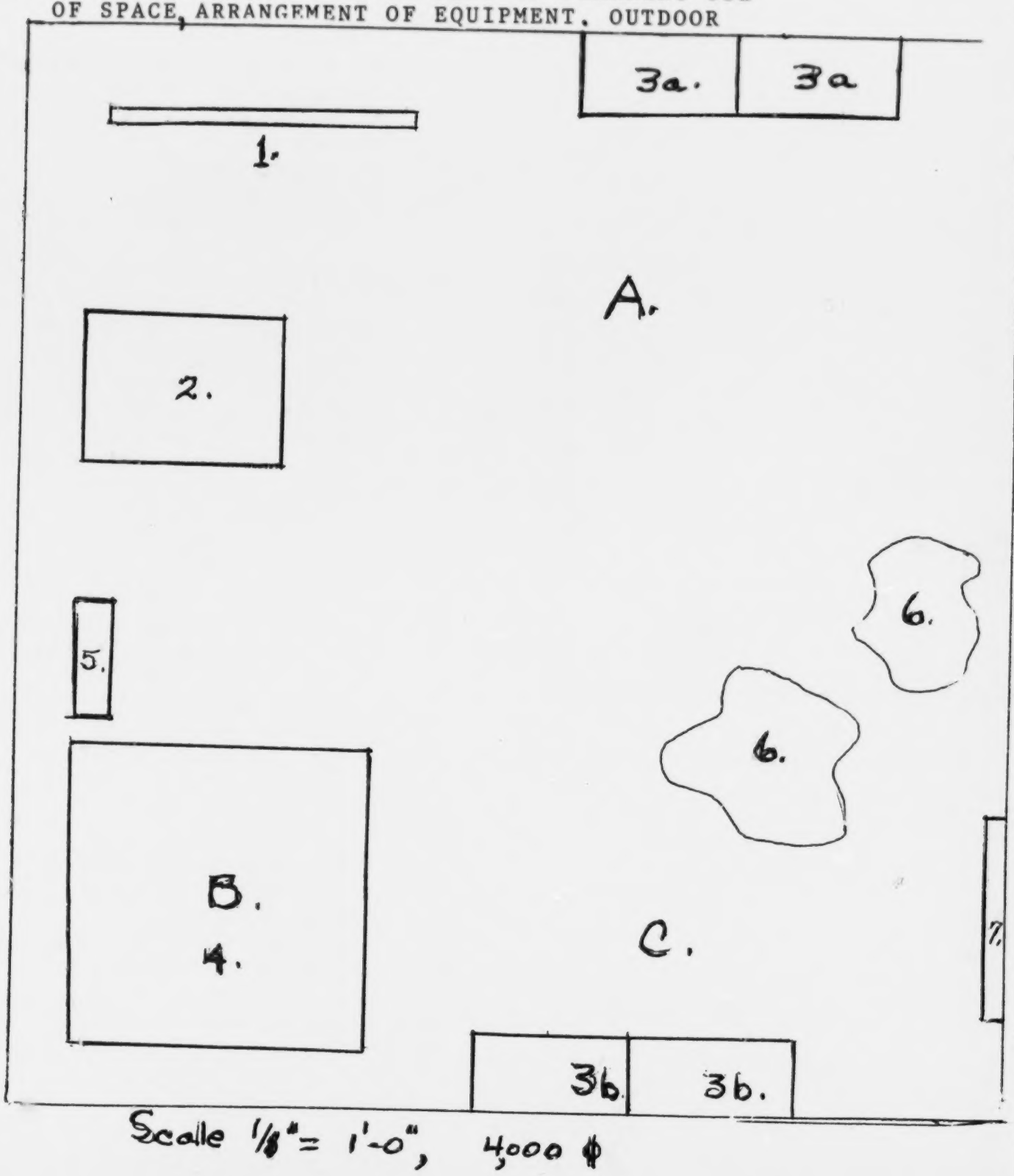
A. Creative Arts
B. Science and Manipulative Equipment
C. Language - Library, Music
D. Blocks
E. Woodwork
F. Housekeeping Family and Community Life.

EQUIPMENT

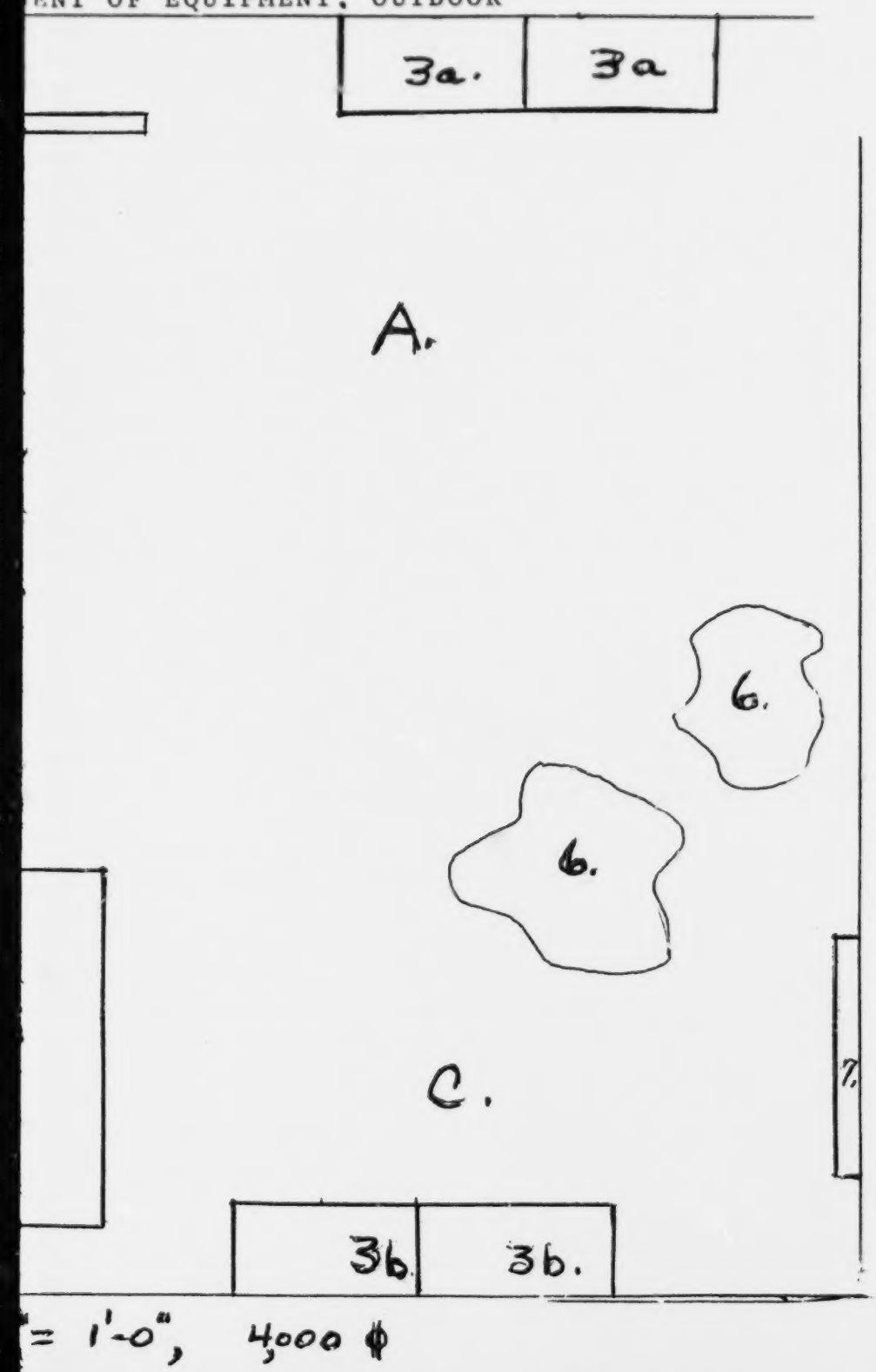
1. Table, 36" x 24" x 21"
2. Table, 24" x 24" x 21"
3. Table, round with chairs
4. Chairs, 12" stacking
5. Chairs, 12" rocking
6. Open shelving, 48" x 30" 48" x 30" x 12" (2 shelves high)
7. Easels, double
8. Rack for drying children's paintings
9. Library display unit
10. Open shelving, blocks, 48" x 42" x 12" (3 shelves high)
11. Woodwork bench
12. Dress up unit, full length mirror
13. Doll bed
14. Cradle
15. Sink (play) (or shelving 48" x 30" x 12")
16. Stove
17. Dish cabinet
18. Children's lockers

Food service family style at tables in Areas

ONE ILLUSTRATION OF PRINCIPLES IN PLANNING USE OF SPACE, ARRANGEMENT OF EQUIPMENT, OUTDOOR



PRINCIPLES IN PLANNING USE
ENT OF EQUIPMENT, OUTDOOR



AREAS

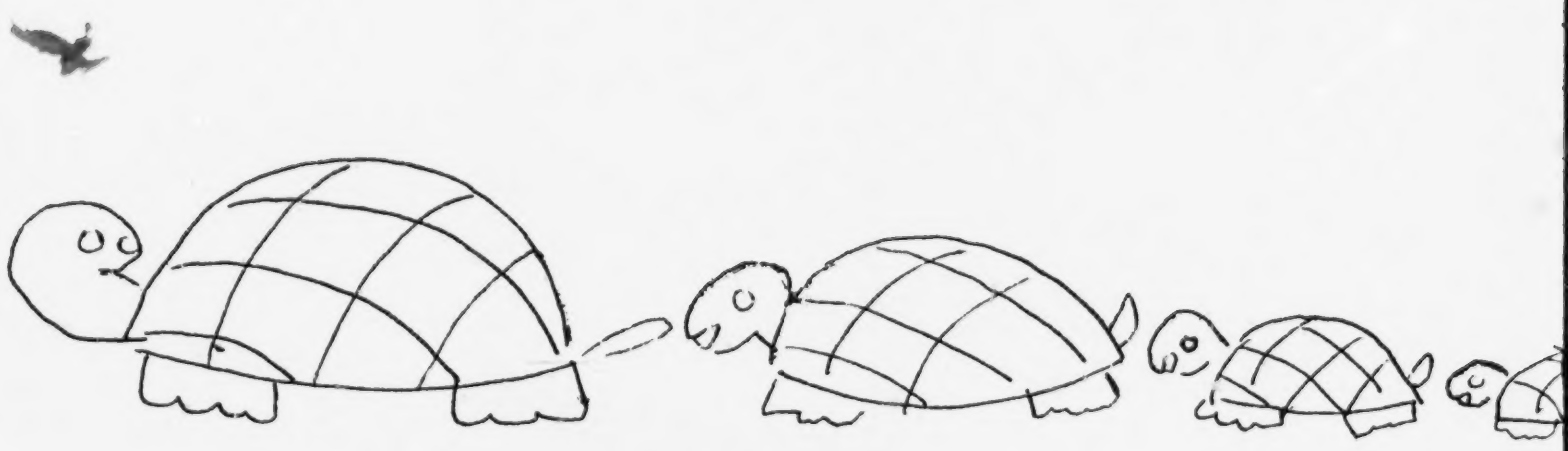
A. Climbing, Sliding, Balancing, Swinging
B. Sand - Work - Play
C. Block Building, Housekeeping, Painting, Quiet Activities

EQUIPMENT

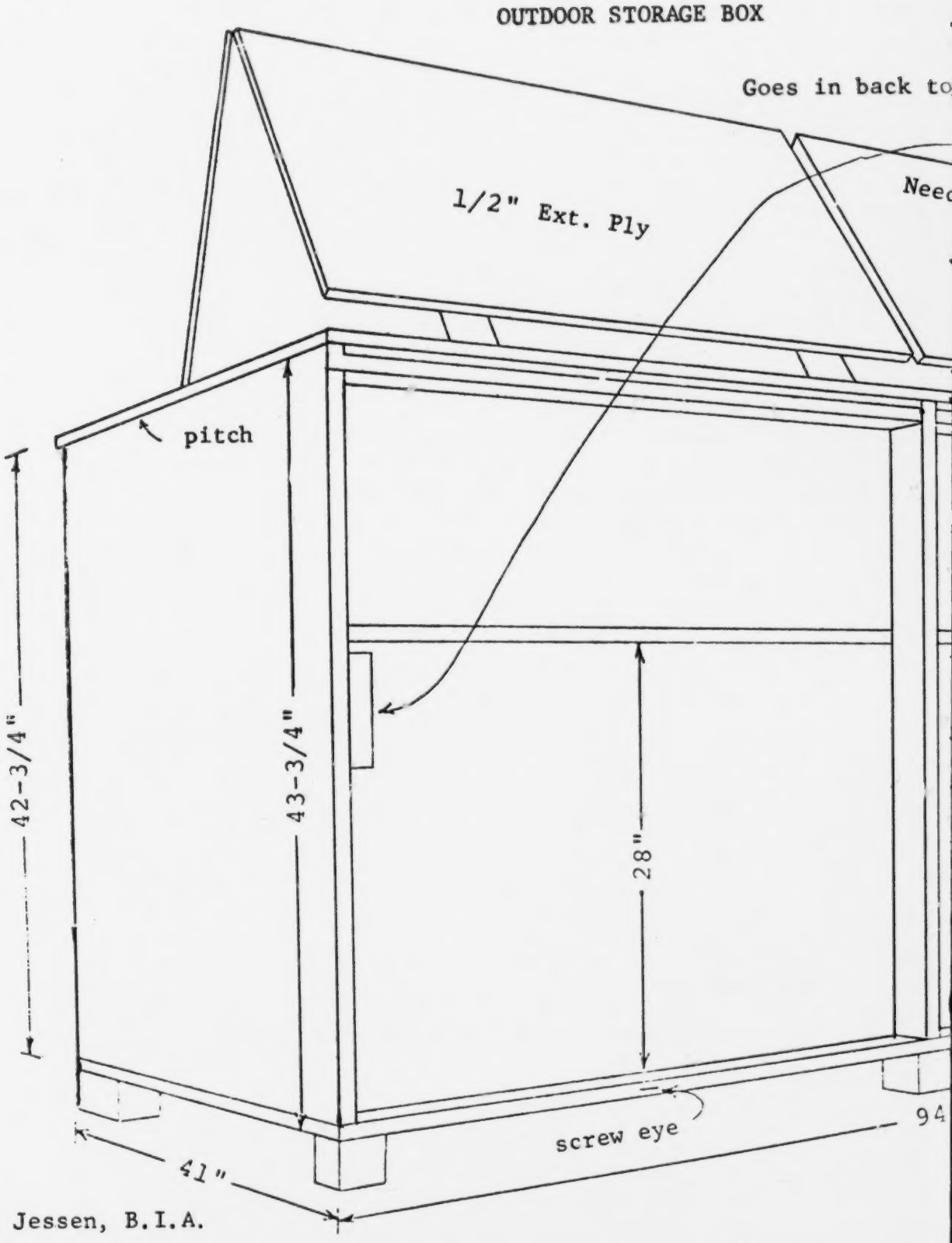
1. Swings (old tires)
2. Climber
3a. Storage boxes for boards, saw horses, wheel toys, ladders, accessories
3b. Storage boxes for hollow blocks, play boards, kegs, accessories
4. Sand box
5. Storage for sand toys
6. Structures indigenous to Indian community
7. Easels

PLANS, SPECIFICATIONS AND IDEAS FOR CONSTRUCTION OF EQUIPMENT AND SUPPLIES

Storage Boxes - Outdoor Equipment
Climber, and Double Slide
Sawhorses, Large
Crates, large and steps
Work bench - Carpentry - Sawhorse
Jumping board
Outdoor, double easel
Indoor, double easel
Outdoor sandbox with hinged top
Sand toy cupboard
Ironing Board, play
Children's lockers
Shelving for Equipment, short
Shelving for Equipment, long
Stuffed toys: rag doll, catepillar horse, pig, turtle, butterfly, head for stick horse.

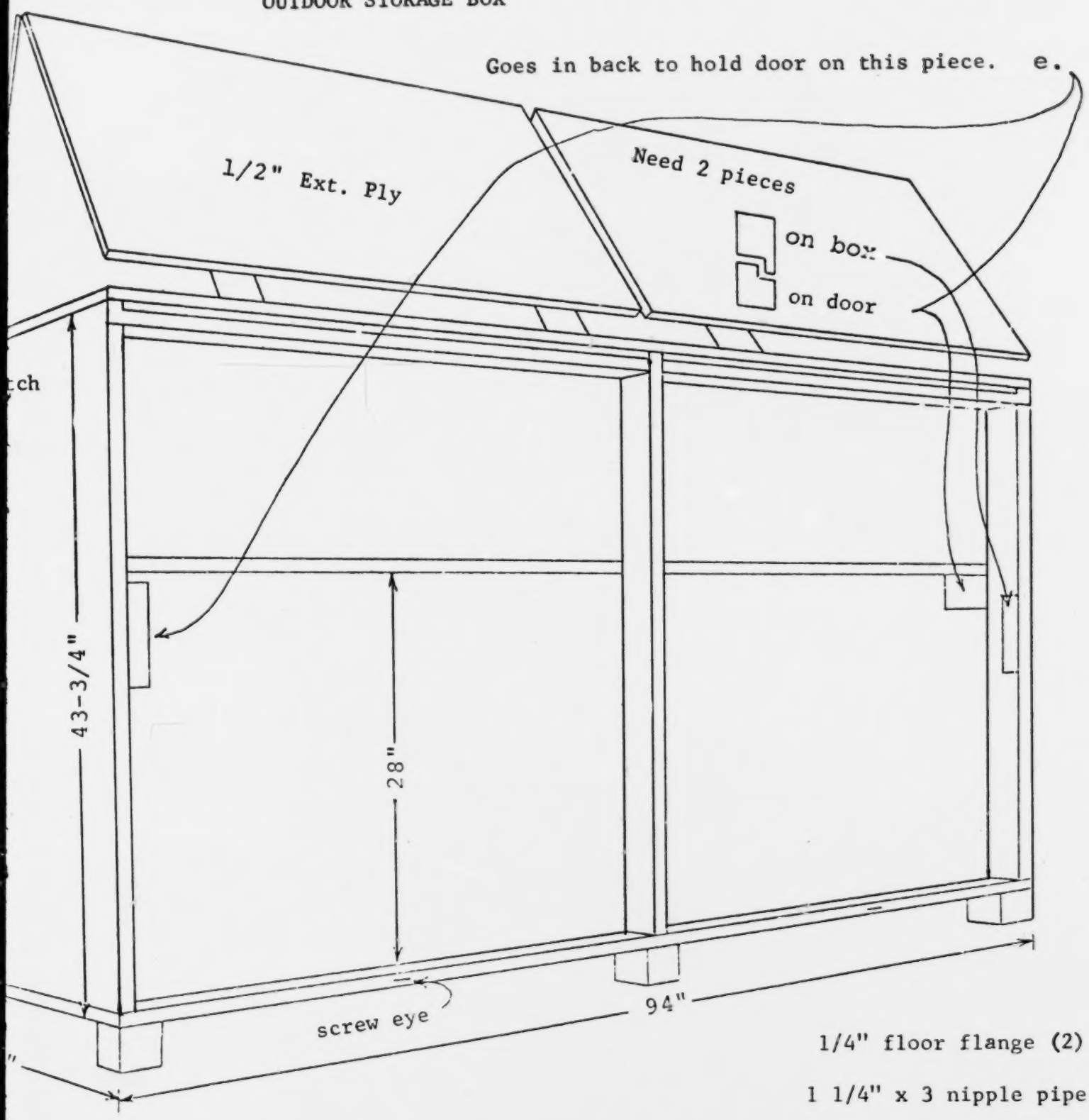


OUTDOOR STORAGE BOX



Mariana Jessen, B.I.A.

OUTDOOR STORAGE BOX



1/4" floor flange (2)

1 1/4" x 3 nipple pipe

STORAGE FOR OUTDOOR EQUIPMENT

Storage Boxes - with locked fronts, 2 doors hinged on top* or could be hinged from side and top and bottom shelves.

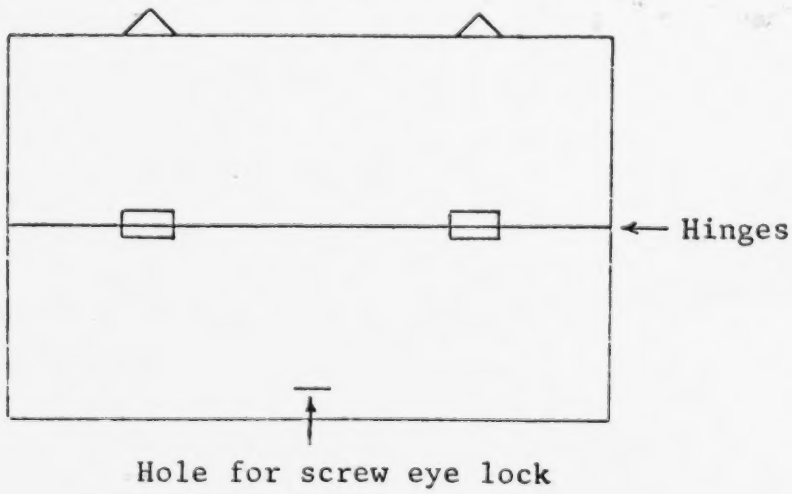
Dimensions - (see photograph)

Materials Needed

4 pc. 2 x 3 90 1/2" for top and bottom
4 pc. 2 x 3 42 3/4" for back
4 pc. 2 x 3 39 3/4" for top and bottom cross piece
2 pc. 2 x 3 43 3/4" for front
2 pc.. 3/4" exterior ply for sides, 39 3/4" x 43 3/4"
1 pc. 3/4" exterior ply for back, 42 3/4" x 94"

Bottom and top shelf 1 x 12 white pine or plywood also 12 - 1 1/4 floor flagnes - 6 - 1 1/4" pipe nipples 1 pc. galvanized sheet metal or tar paper for top 42" x 96"

2 doors - 4 pcs. 1/2 ply from sheet 4' x 8' Sheet metal corner 2 x 2 for strength on back.

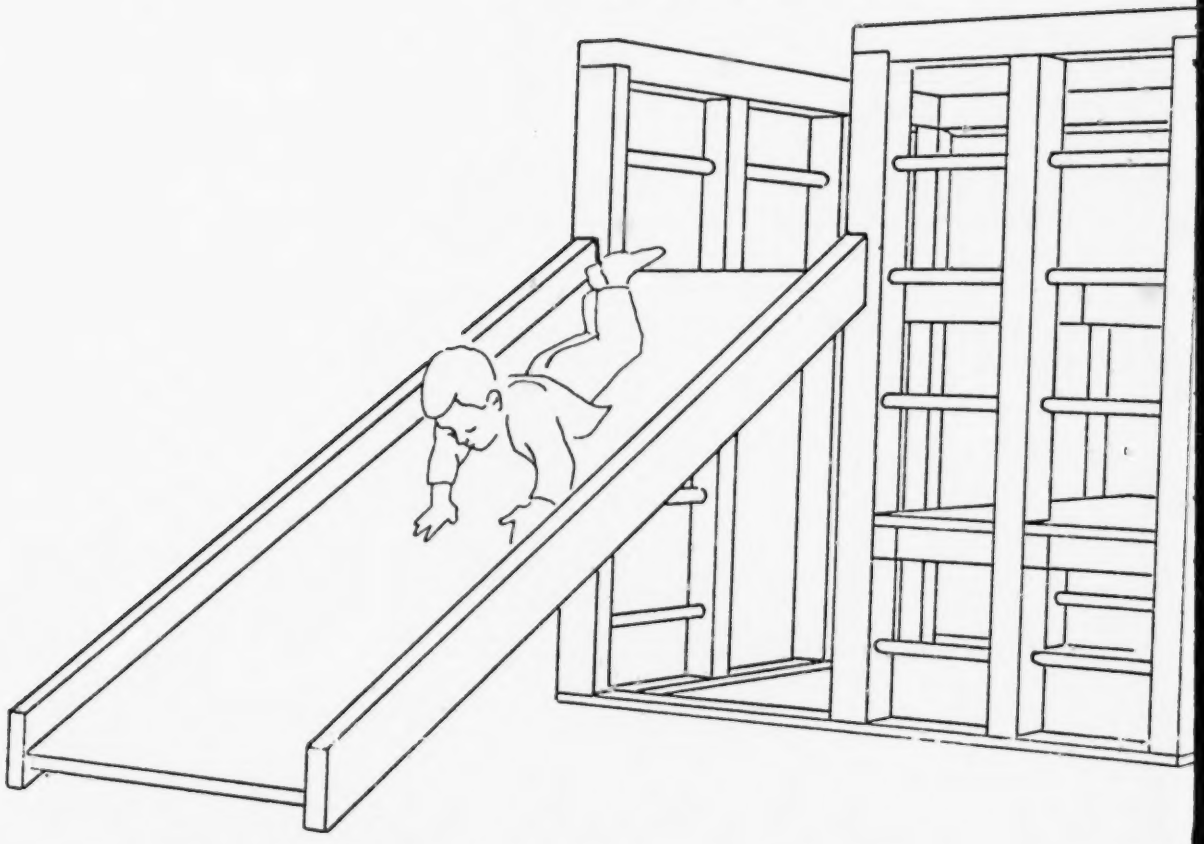


*Front hinged on top

Designed by Mariana Jessen

CLIMBER AND DOUBLE SLIDE

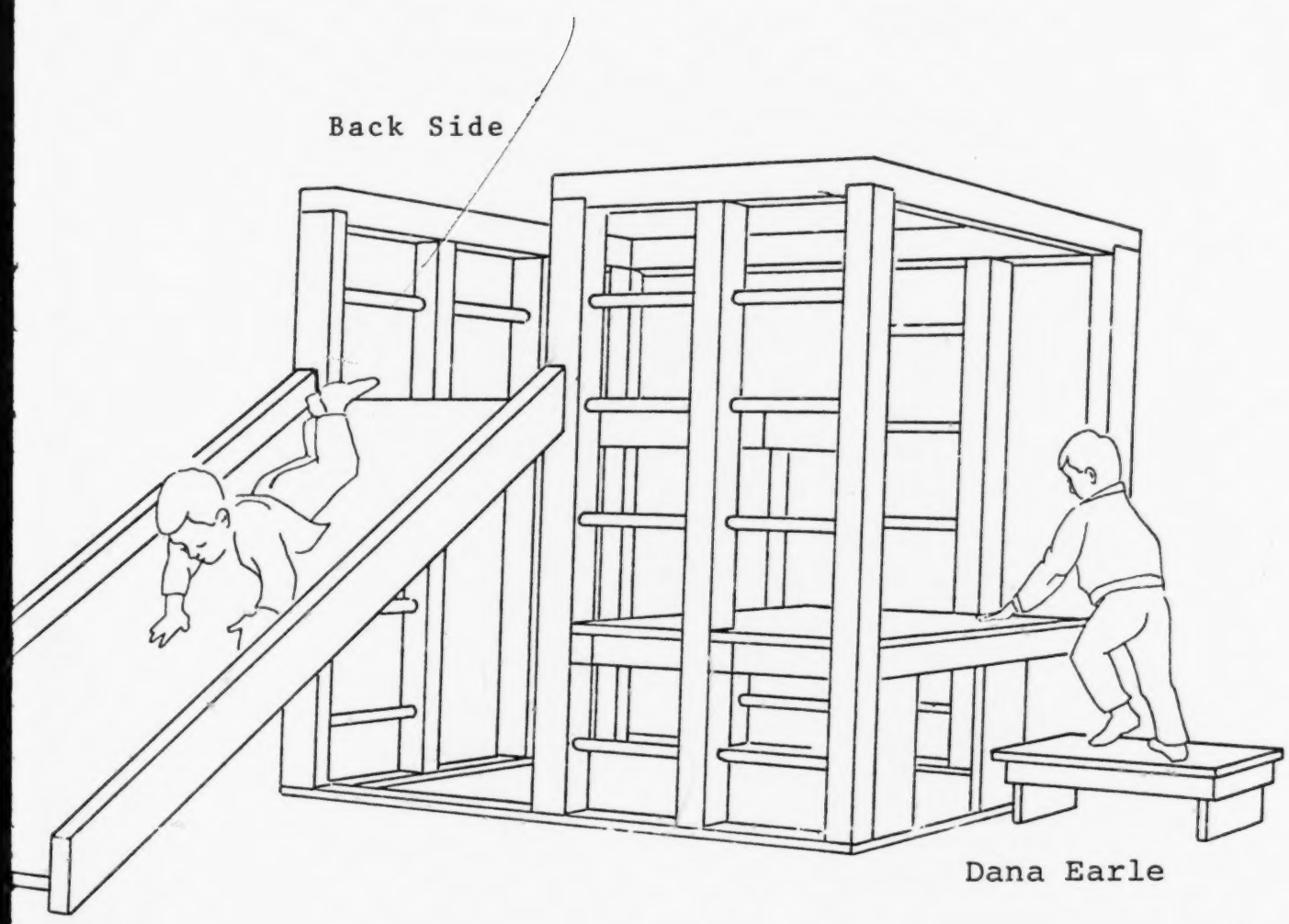
Back Side



Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery Sc

A roof or protective structure should be added in hot climates

CLIMBER AND DOUBLE SLIDE



ector, Vassar College Laboratory Nursery School, Poughkeepsie, New York
e structure should be added in hot climates.

Platform Climber with Double Slide

designed by -- Dorothy
Vassar Colleg
School
Poughkeepsie,

Dimensions:

•5'8" high - 6' x 6' overall. All uprights and base are dressed fir 4" x 4"s. The base is placed on a foundation of brick. The climber is finished with a wood preservative and two coats of marine varnish. The metal rungs are painted with aluminum paint.

Lower Platform:

1' 10" from the ground
6' long, 3'2" wide
Boards (Arkansas pine 1" x 4")

Upper Platform:

2' from lower platfor
Same length and width

Two Lower Crawl Spaces without Rungs

17" x 17" x 17"

Galvanized Pipe Rungs

3/4" pipe
11" between all rungs
Back side rungs: 17"
Two side rungs: 13-1

Permanent Double Slide

Galvanized sheet iron slide bed
  7'6" long
  2'7" wide
Metal sides: 6" high, 1-3/4" wide
Slide attached to top platform 3'7" from ground

Platform Climber with Double Slide

designed by -- Dorothy Levens, Director
Vassar College Laboratory Nursery School
Poughkeepsie, New York

overall. All uprights and
r 4" x 4"s. The base is
ion of brick. The
with a wood preservative
rine varnish. The metal
ith aluminum paint.

Upper Platform:

2' from lower platform
Same length and width as lower platform

und

ne 1" x 4")

ces without Rungs

Galvanized Pipe Rungs

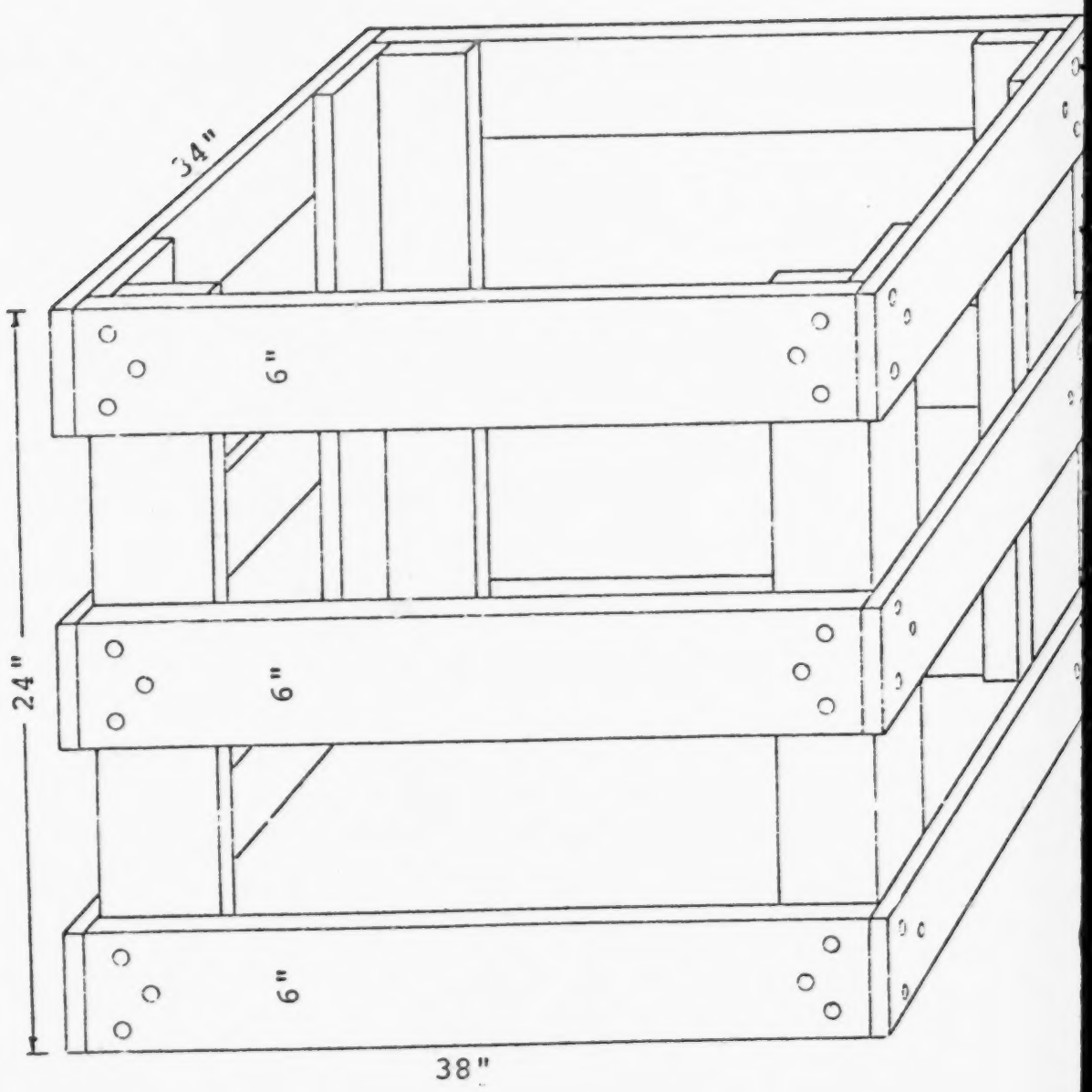
3/4" pipe
11" between all rungs
Back side rungs: 17" long
Two side rungs: 13-1/2" long

ide

on slide bed

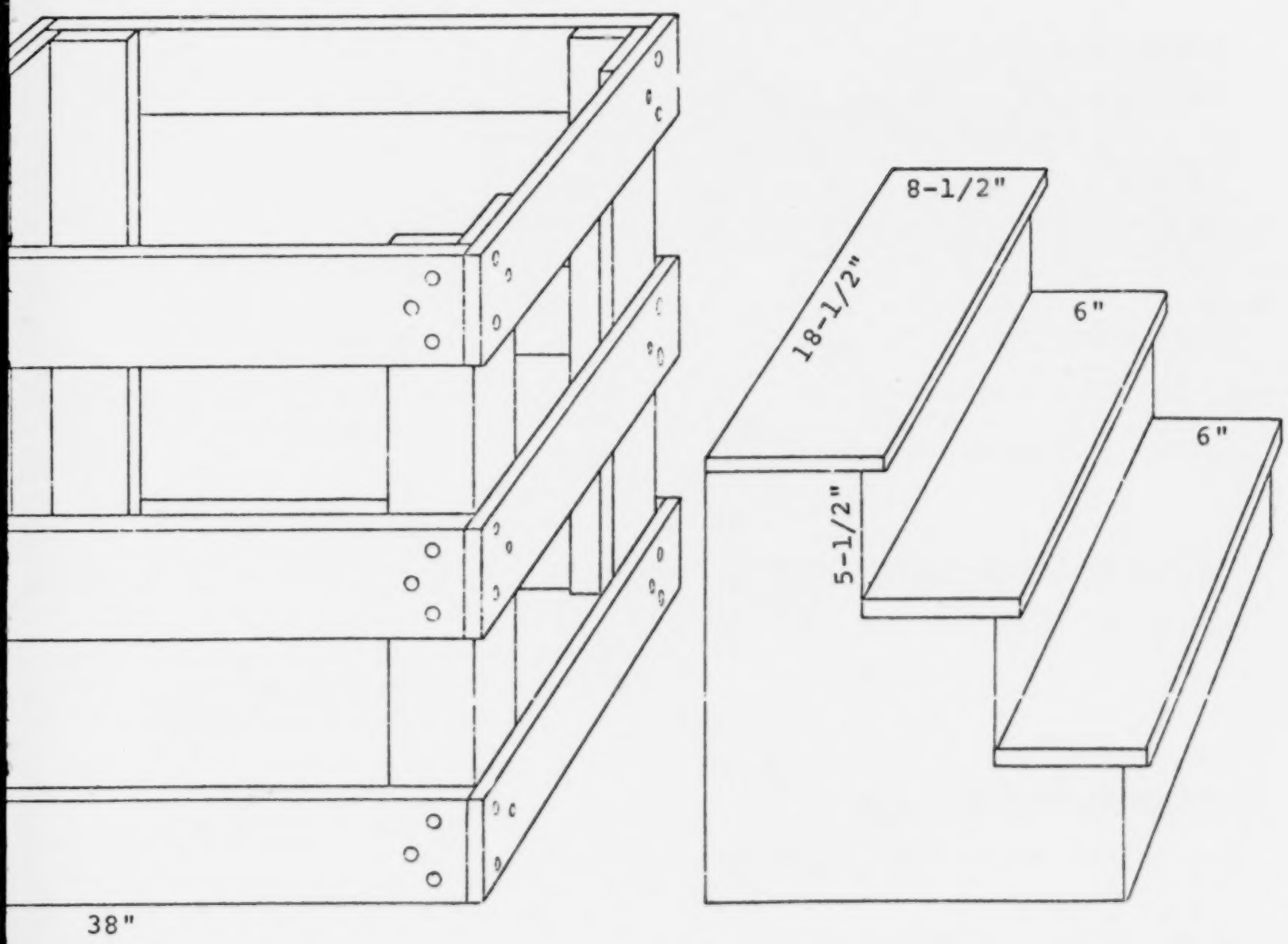
gh, 1-3/4" wide
op platform 3'7" from ground

LARGE CRATE AND STEPS



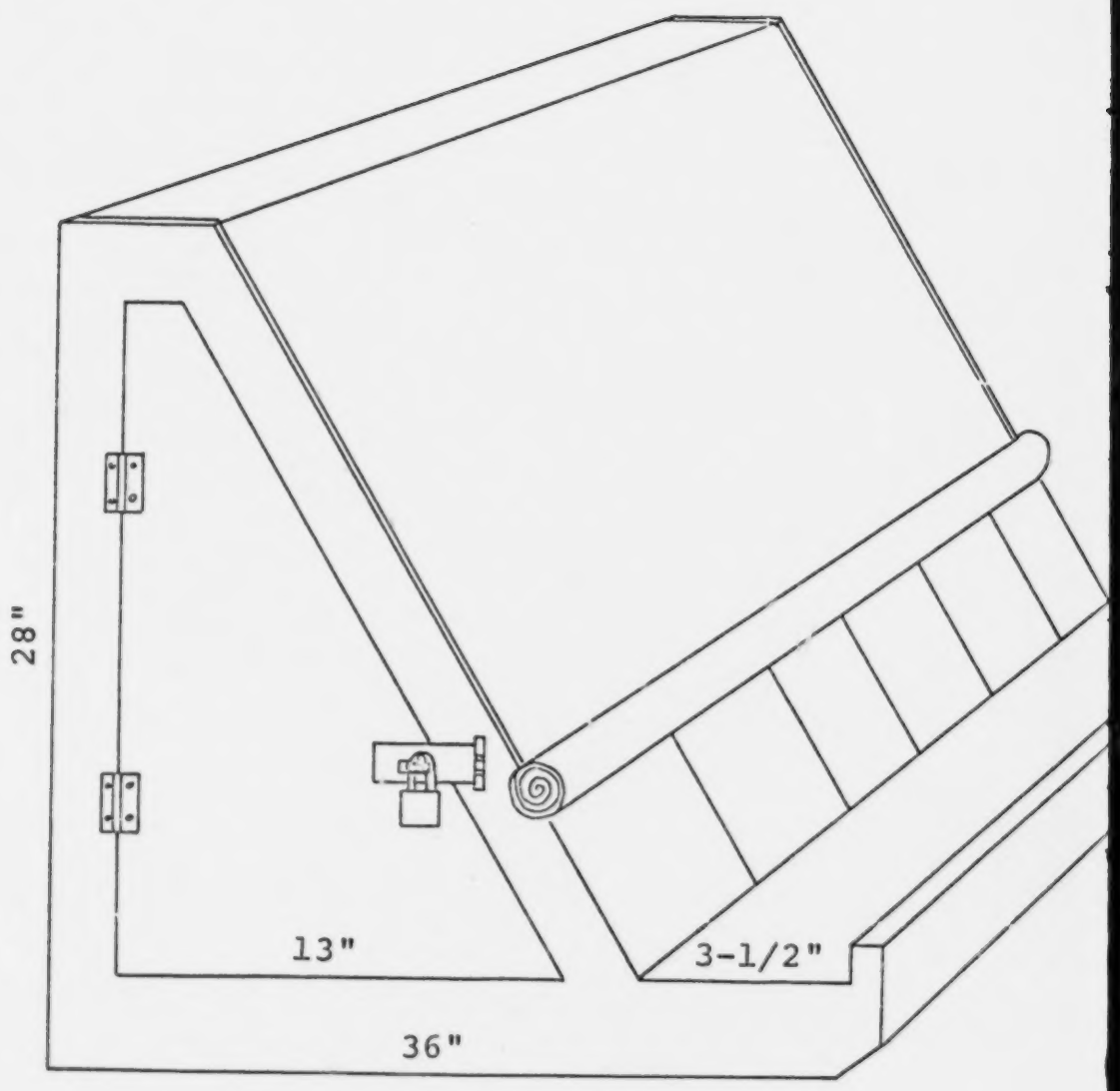
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Po

LARGE CRATE AND STEPS



Vassar College Laboratory Nursery School, Poughkeepsie, New York

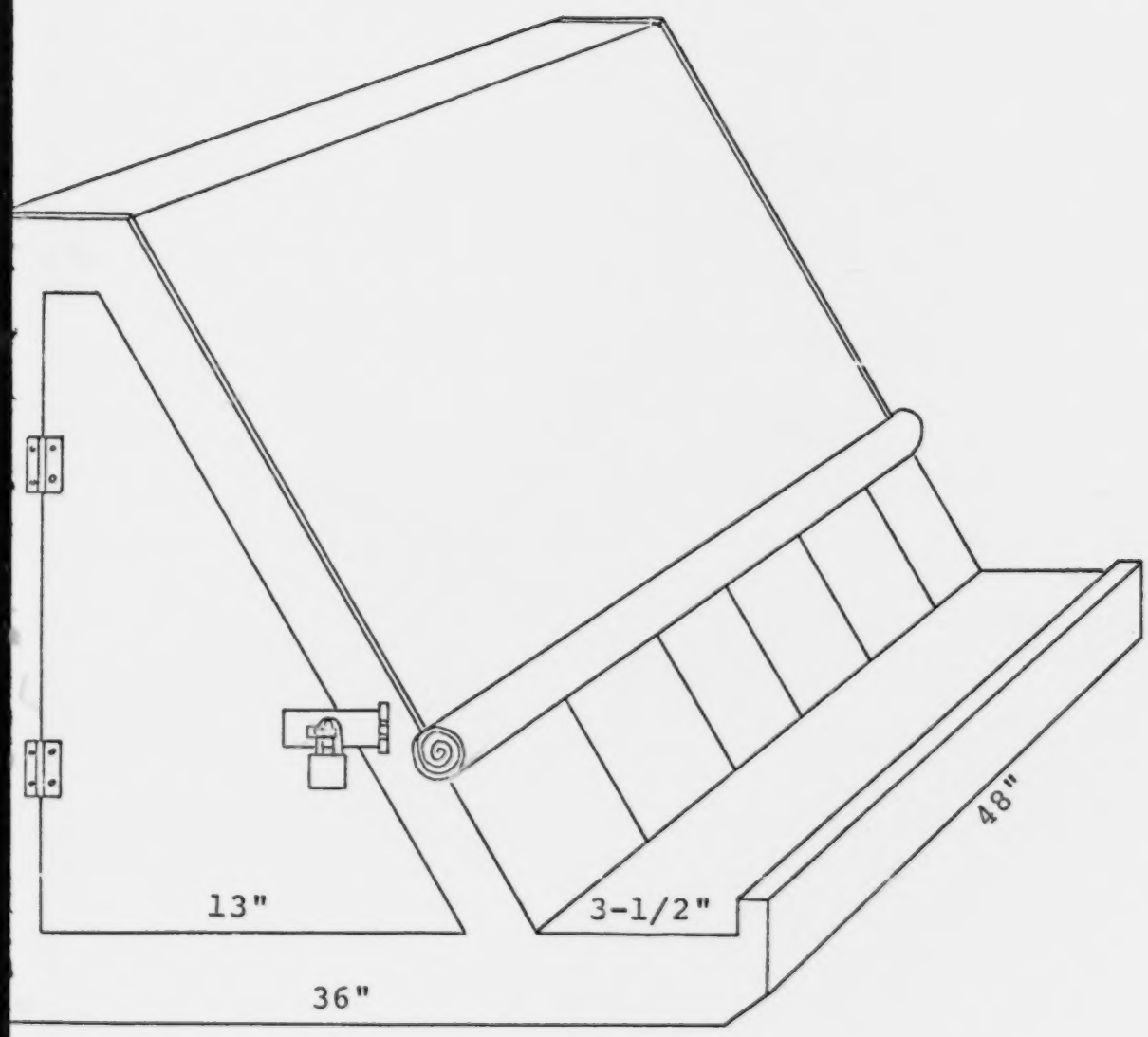
OUTDOOR EASEL



Plywood -(all weather)

Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Pou

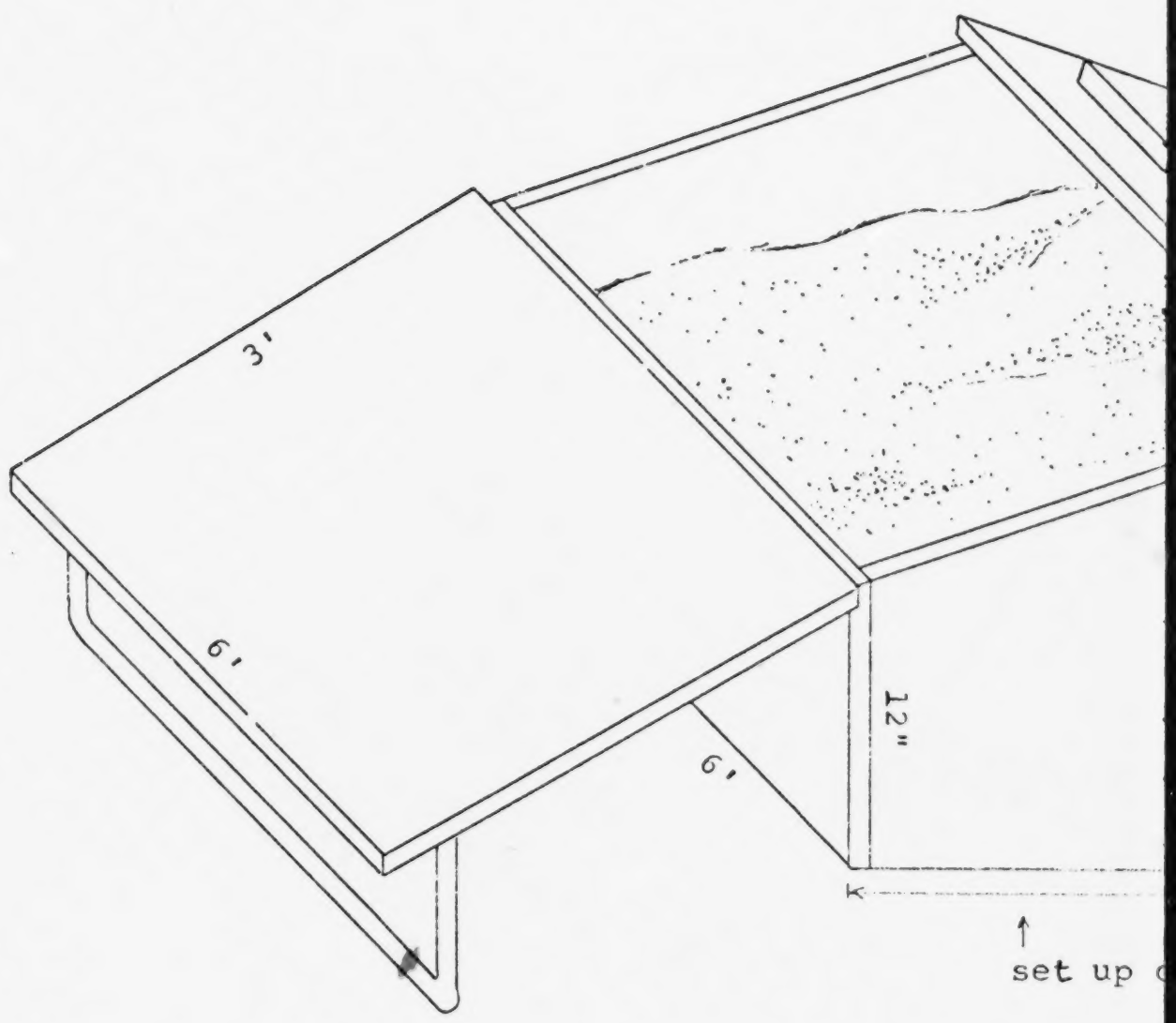
OUTDOOR EASEL



Plywood -(all weather)

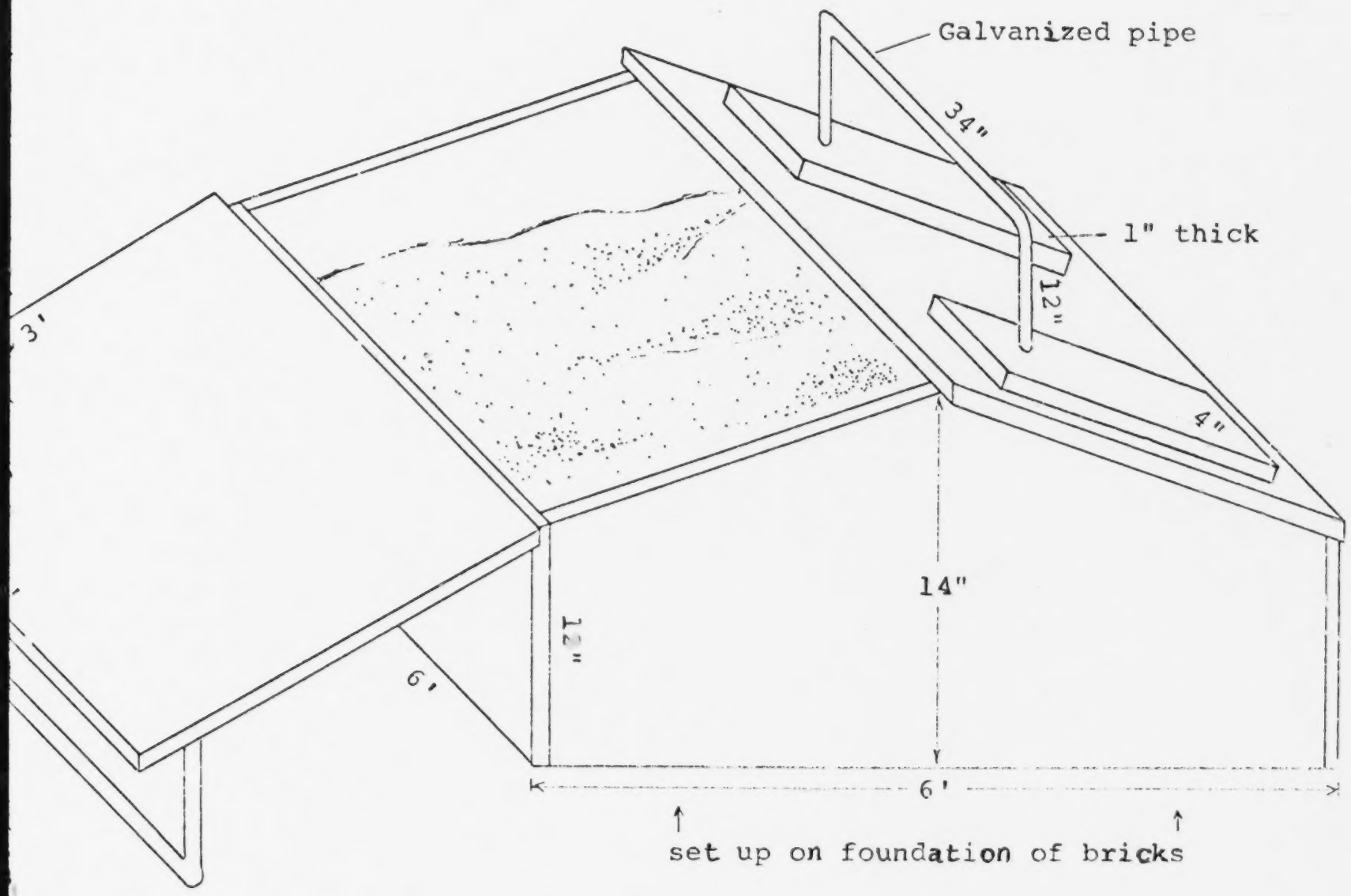
, Vassar College Laboratory Nursery School, Poughkeepsie, New York

OUTDOOR SANDBOX WITH HINGED



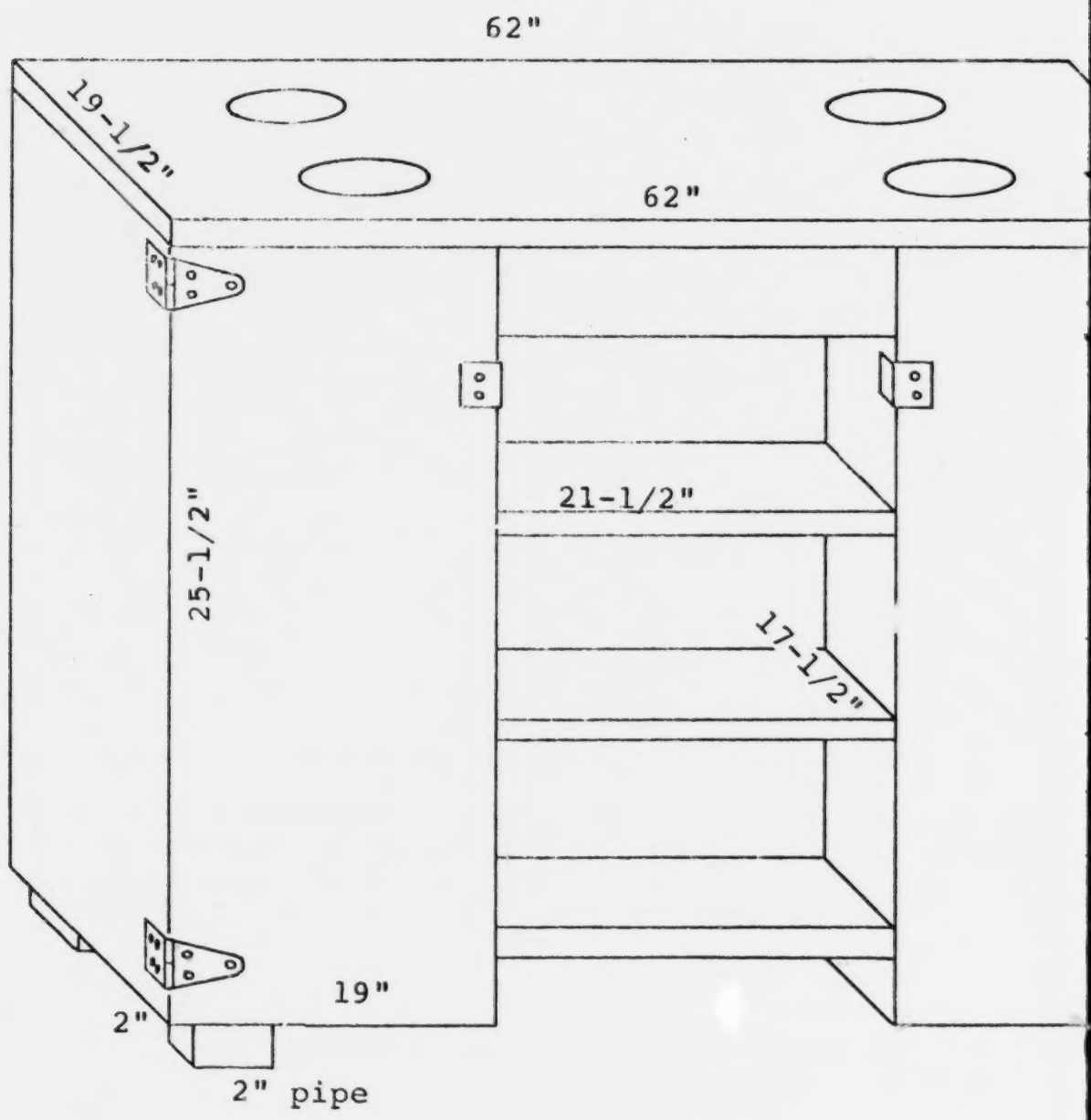
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery

OUTDOOR SANDBOX WITH HINGED TOP



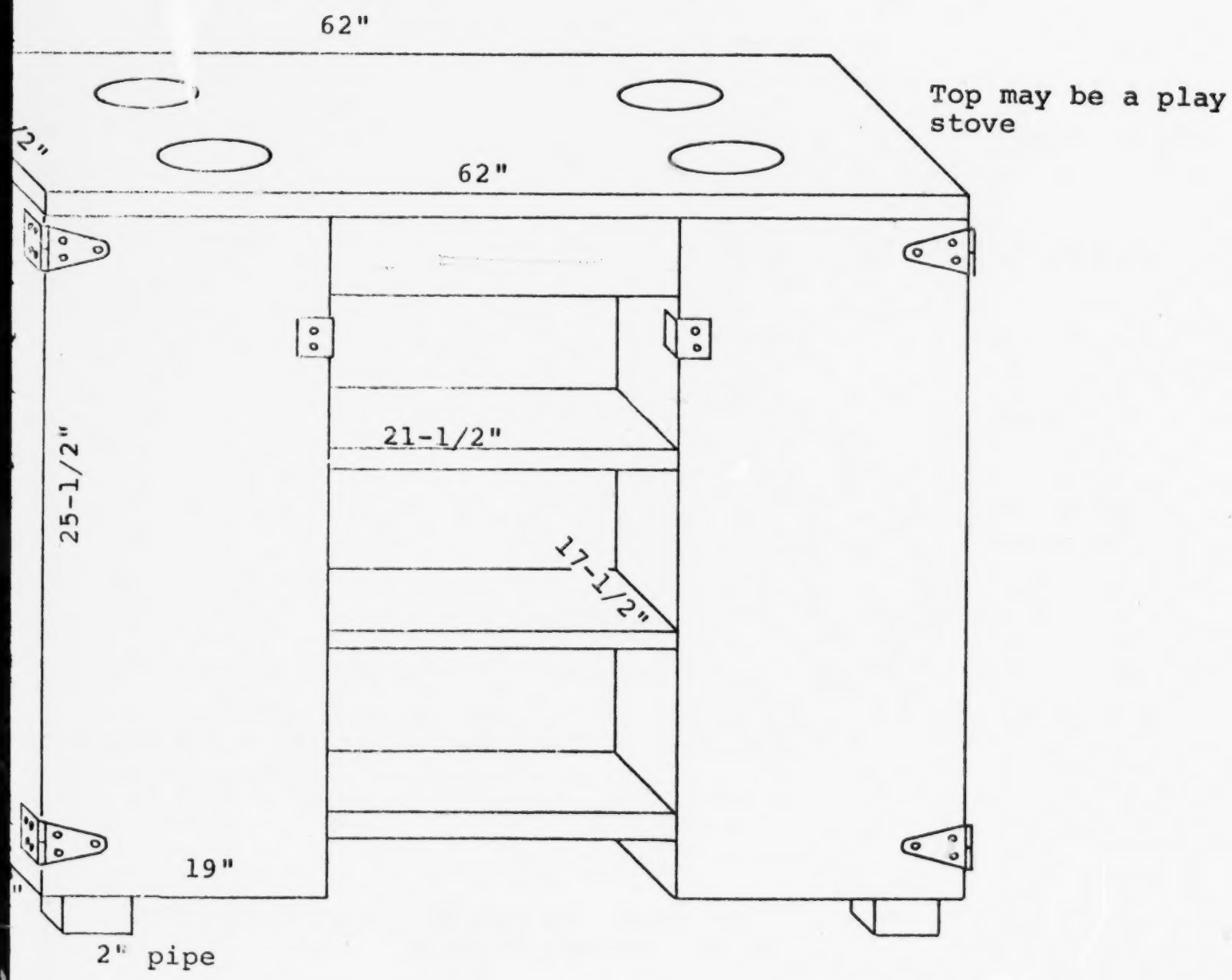
s, Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

SAND-TOY CUPBOARD



Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, P

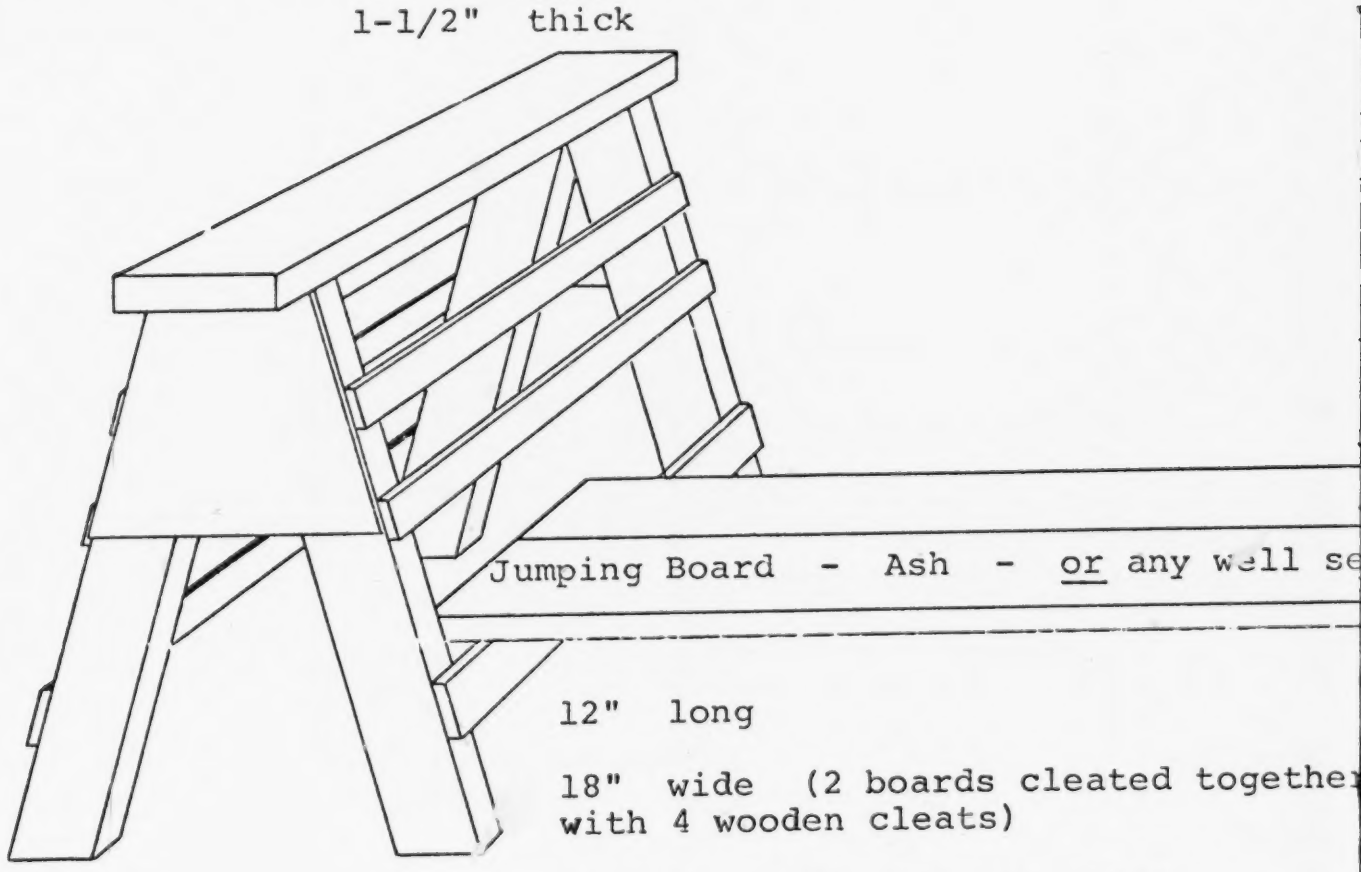
SAND-TOY CUPBOARD



tor, Vassar College Laboratory Nursery School, Poughkeepsie, New York

LARGE SAWHORSES AND JUMPING BOARD

Sawhorse Top:	4'	long
	9"	wide
	1-1/2"	thick
Sawhorse:	31"	high
	26"	wide base
Sawhorse Bars:	38"	long
	3"	wide
	1"	thick
Sawhorse Uprights:	32"	long
	3"	wide
	1-1/2"	thick



12" long

18" wide (2 boards cleated togethe
with 4 wooden cleats)

each board 9" wide, 1" thick

Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery Sch

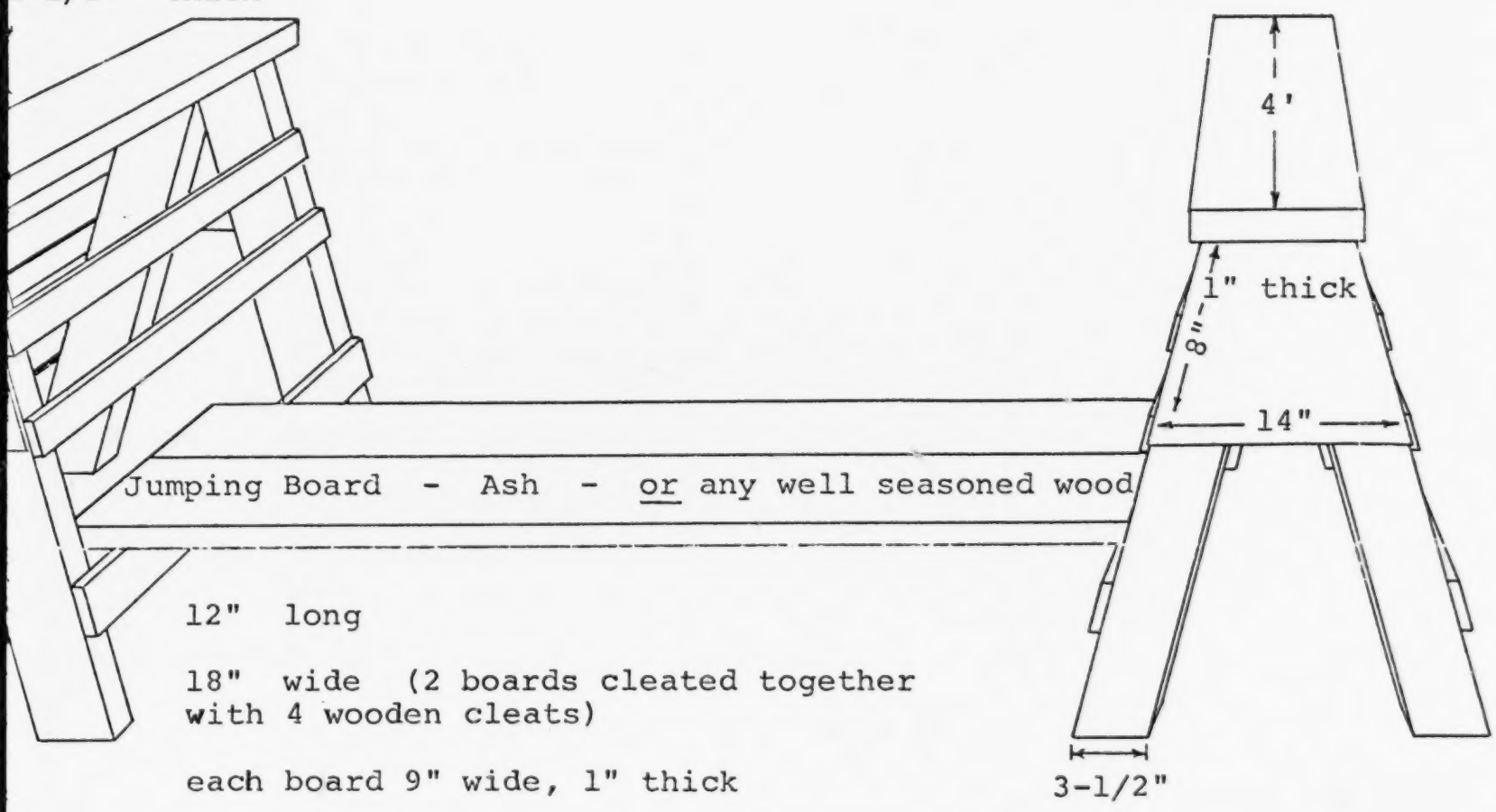
LARGE SAWHORSES AND JUMPING BOARD

4' long
9" wide
1-1/2" thick

31" high
26" wide base

38" long
3" wide
1" thick

: 32" long
3" wide
1-1/2" thick



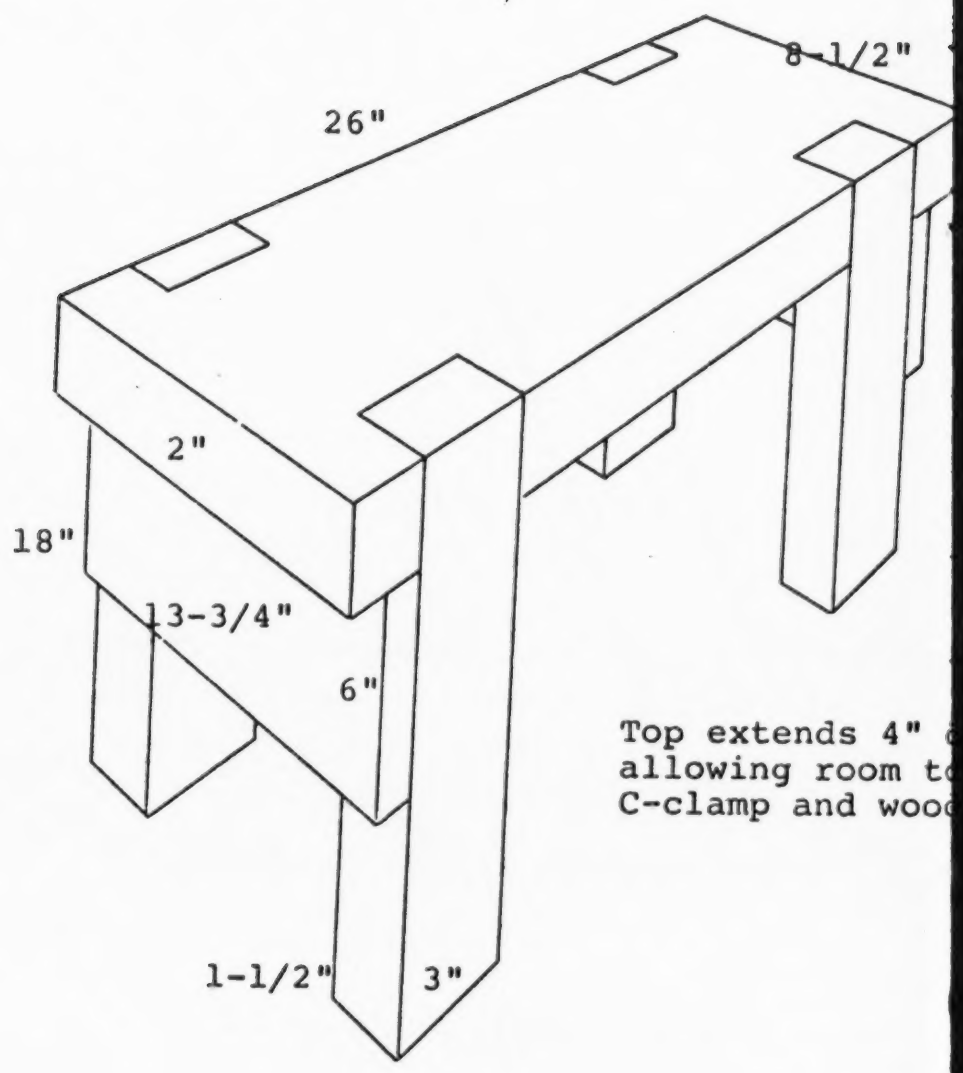
12" long

18" wide (2 boards cleated together with 4 wooden cleats)

each board 9" wide, 1" thick

rector, Vassar College Laboratory Nursery School, Poughkeepsie, New York

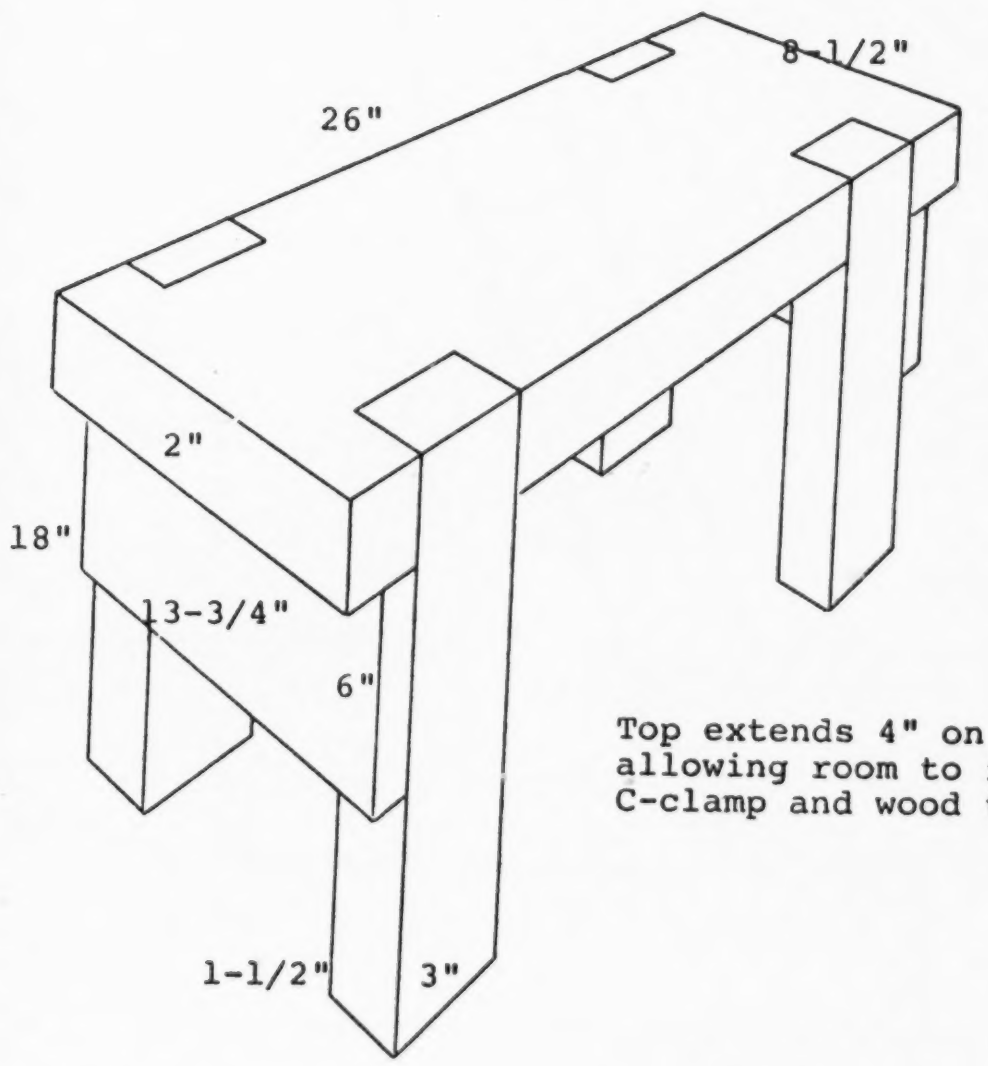
CARPENTRY SAWHORSE



Top extends 4" o
allowing room to
C-clamp and wood

Designed by:
Dorothy Levens, Director, Vassar College Nursery School, Poughkeep

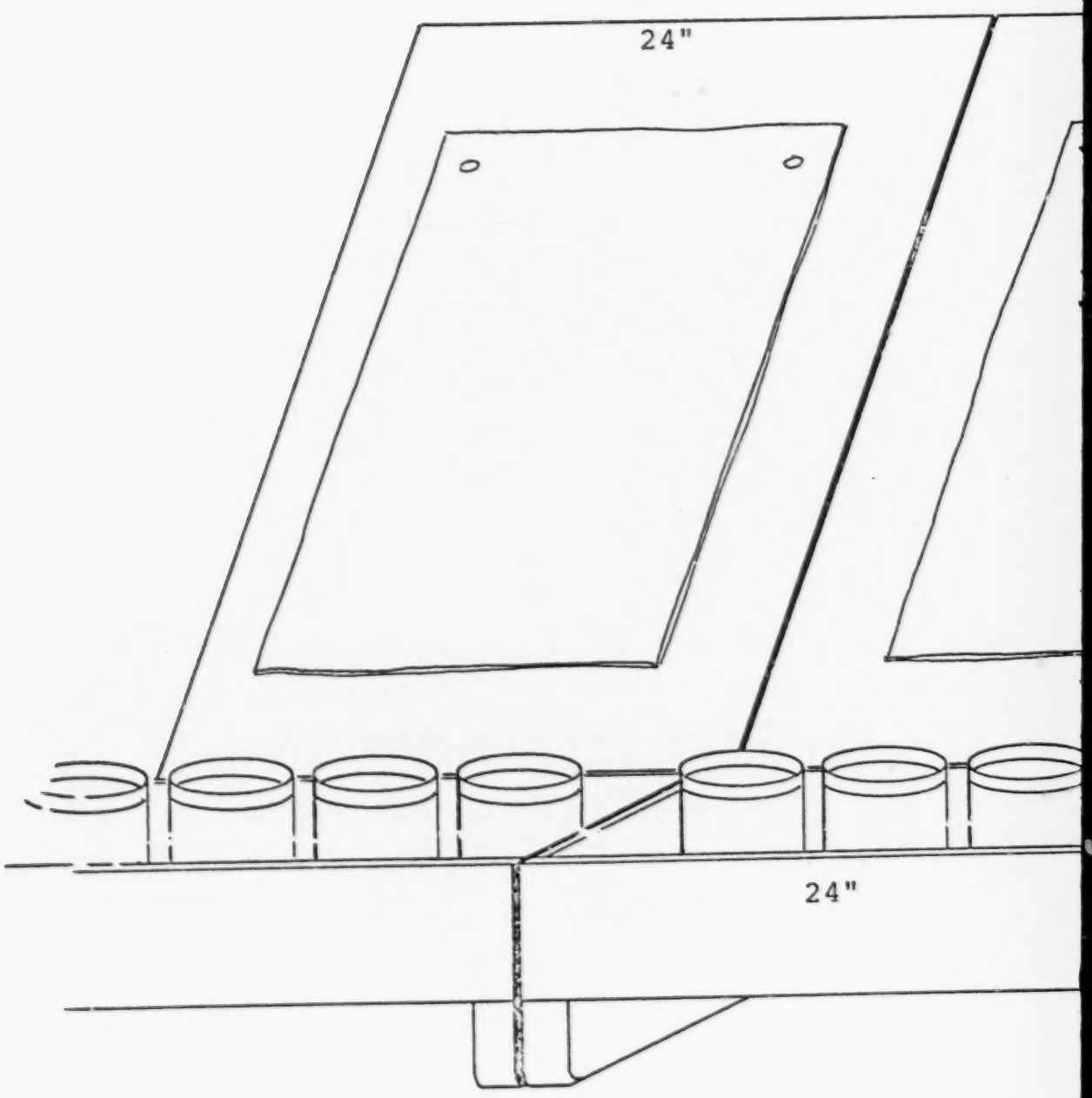
CARPENTRY SAWHORSE



Top extends 4" on each side
allowing room to fasten
C-clamp and wood to sawhorse.

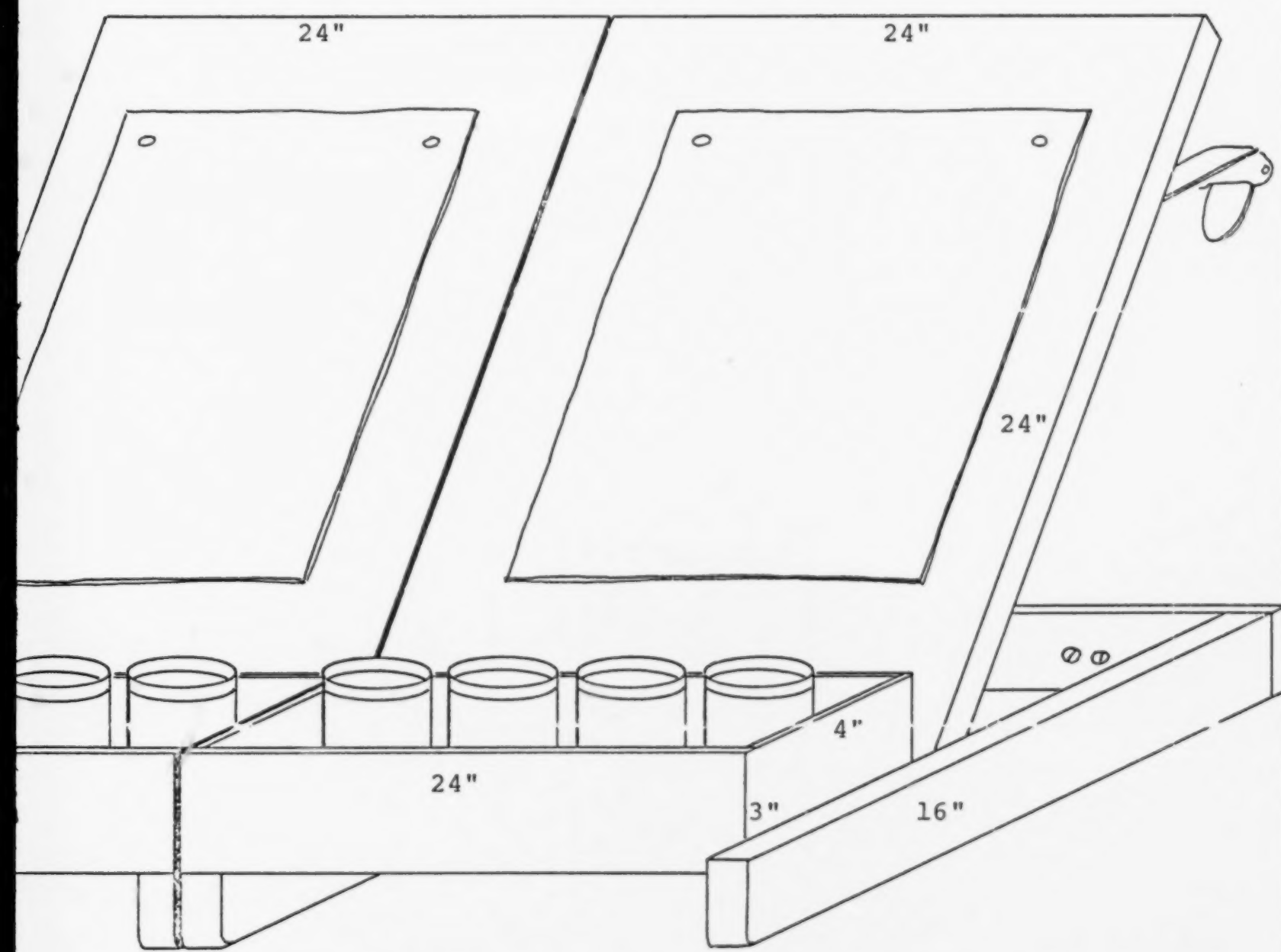
ctor, Vassar College Nursery School, Poughkeepsie, New York

INDOOR DOUBLE-EASEL



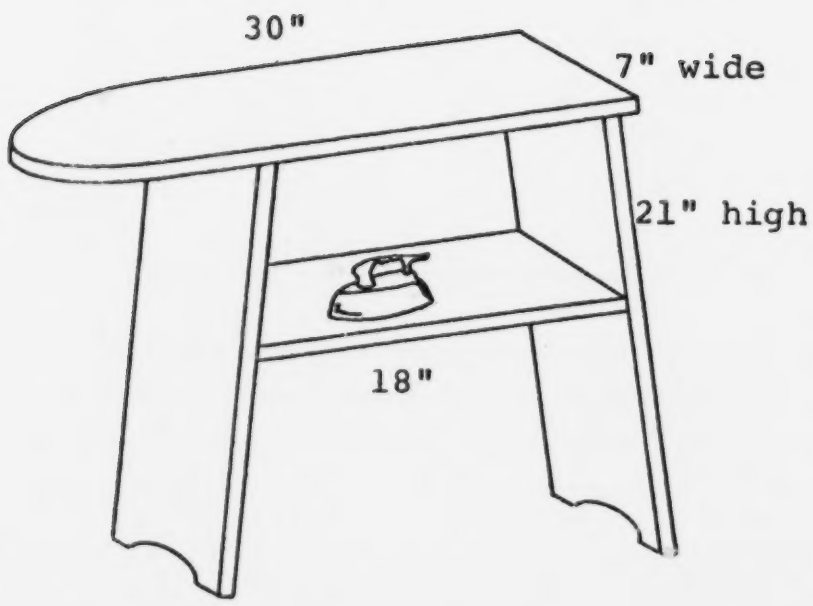
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nurse

INDOOR DOUBLE-EASEL



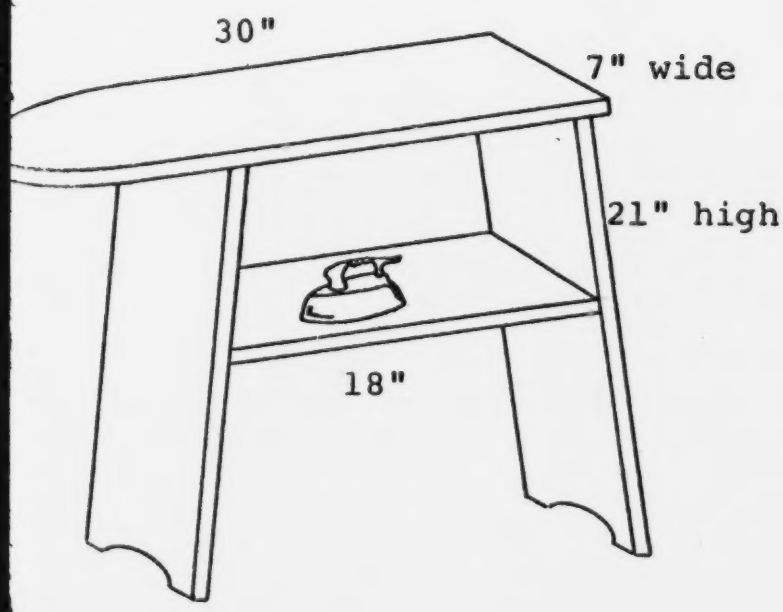
irector, Vassar College Laboratory Nursery School, Poughkeepsie, New York

IRONING BOARD



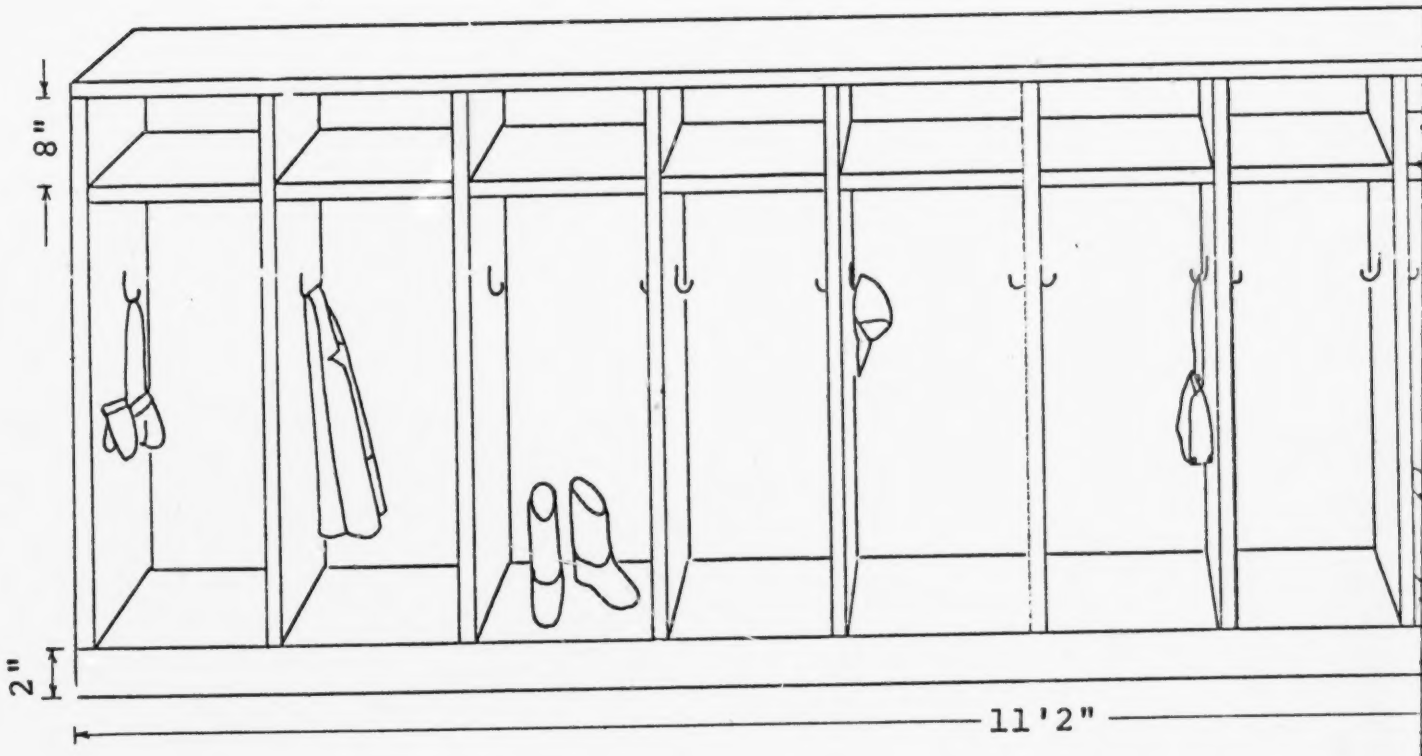
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, P

RONING BOARD



Vassar College Laboratory Nursery School, Poughkeepsie, New York

CHILDREN'S LOCKERS



11'2" long

39" high

12" deep

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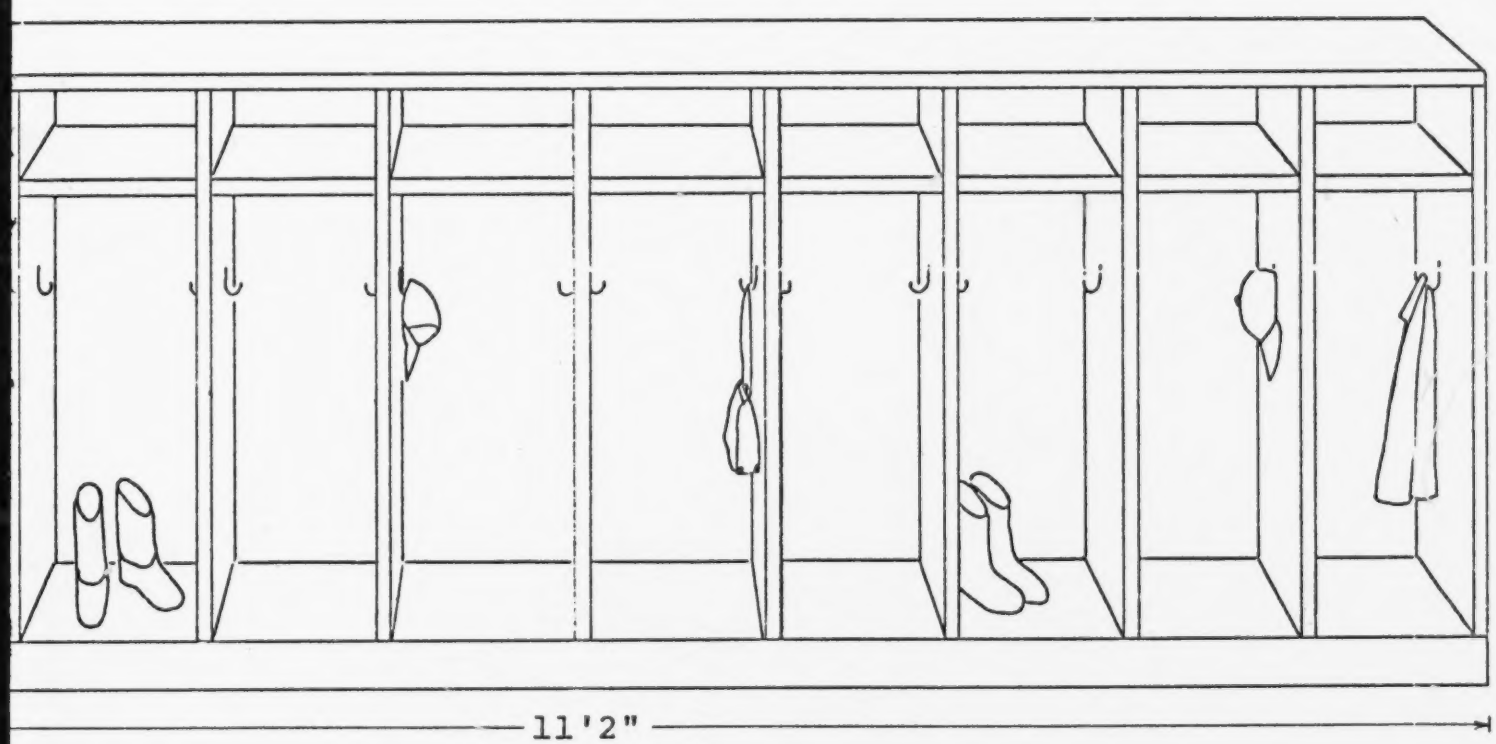
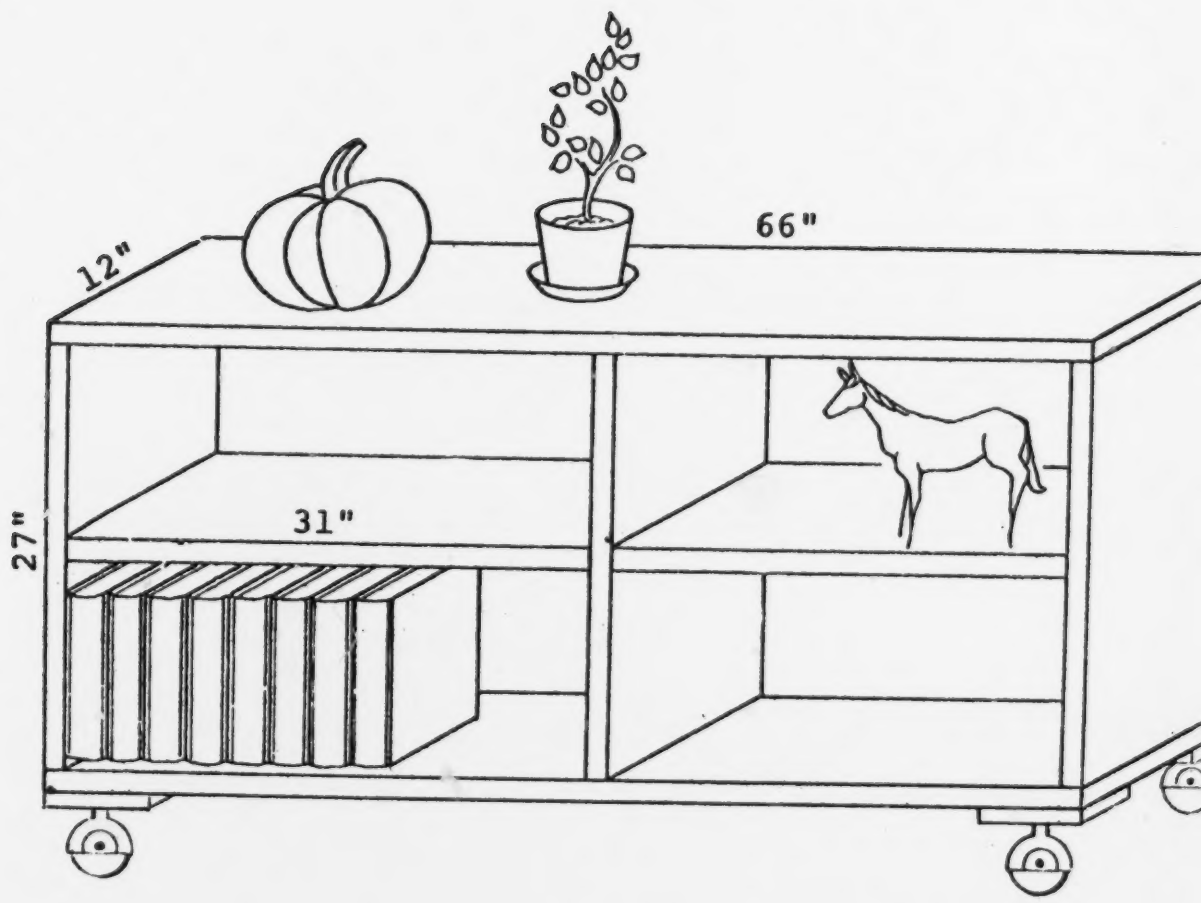
Dorothy Levens, Director, Vassar College Laboratory Nursery School

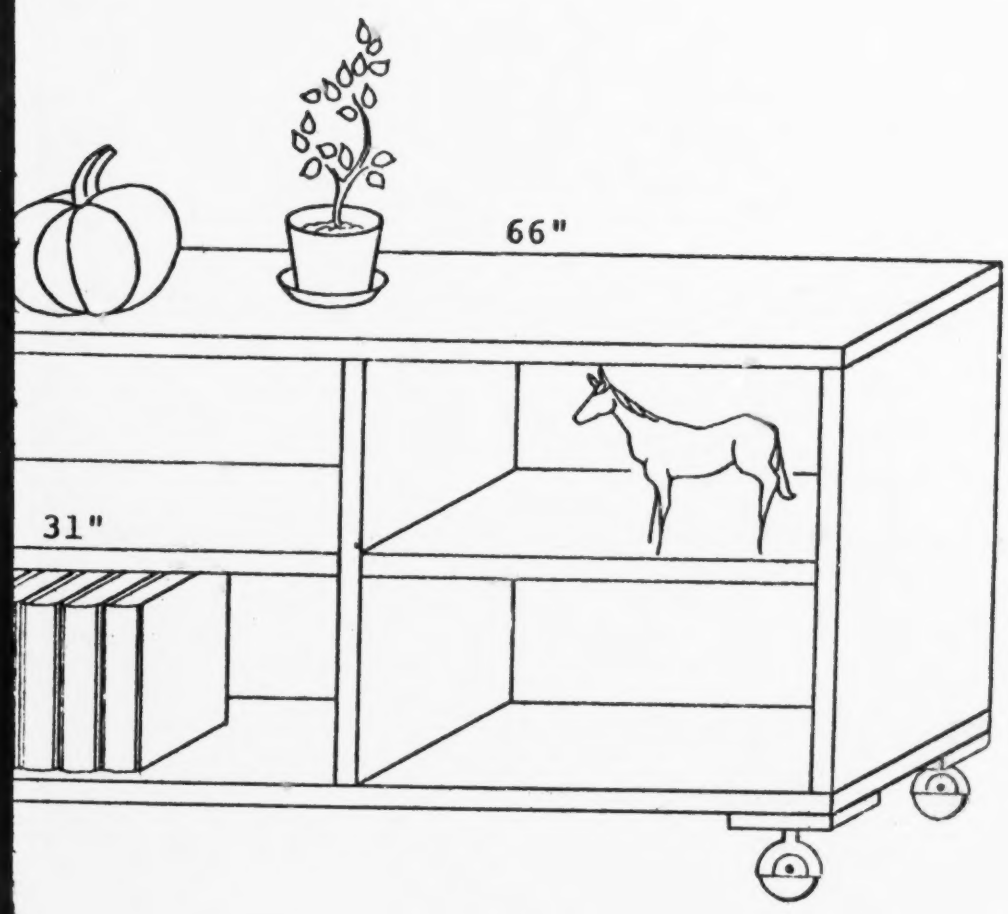
CHILDREN'S LOCKERS



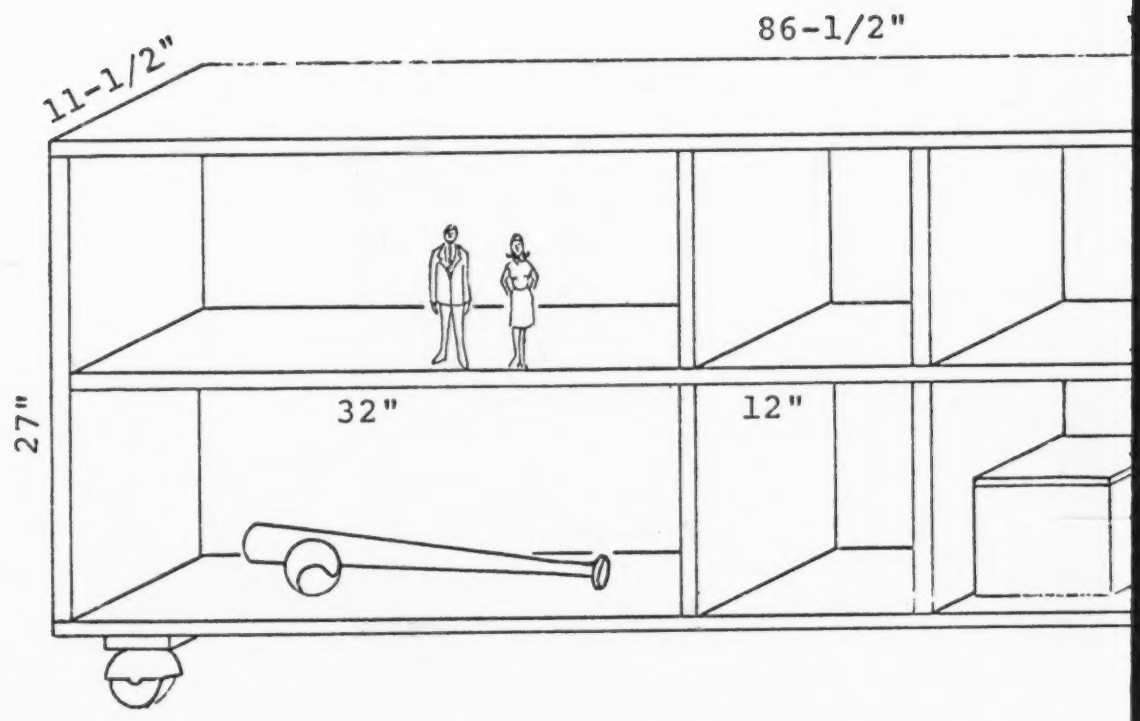
or, Vassar College Laboratory Nursery School, Poughkeepsie, New York



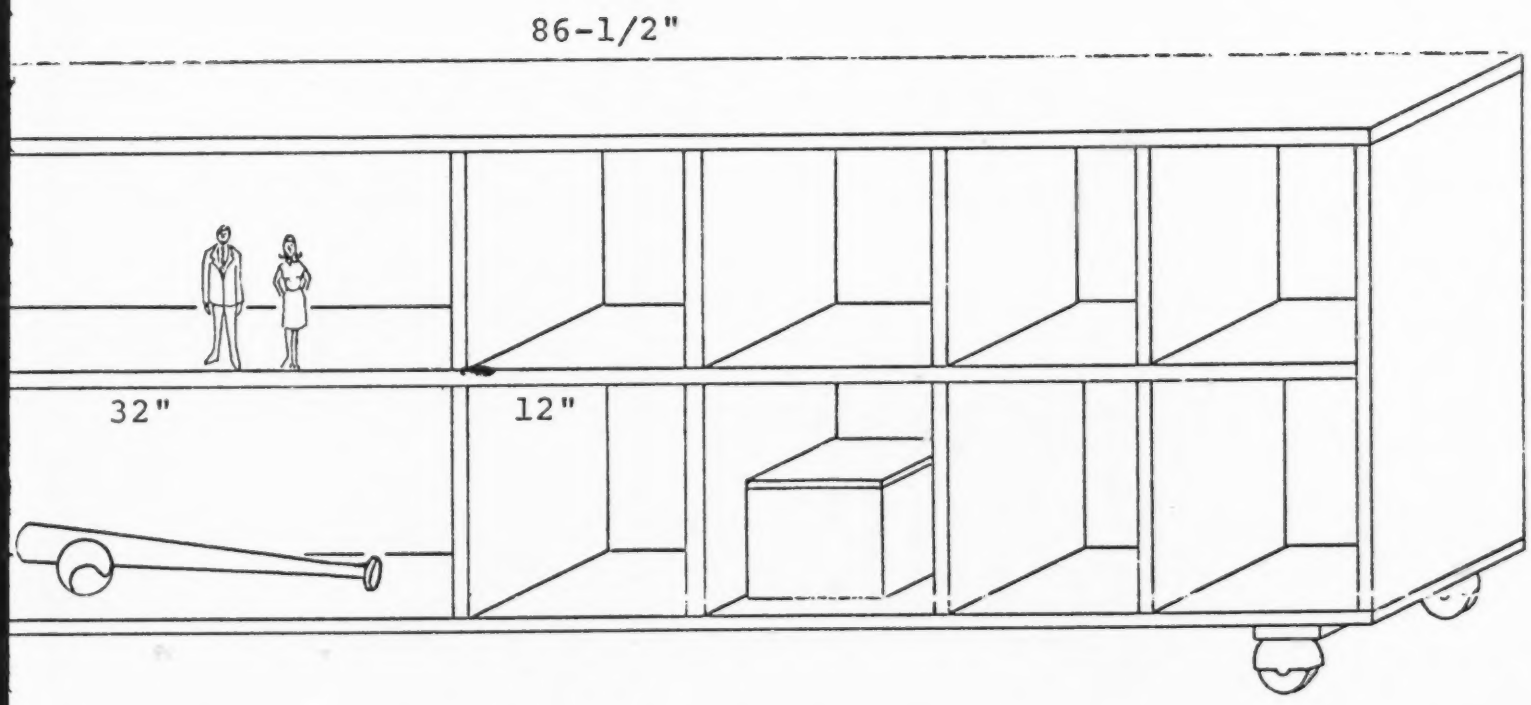
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Poughk



ar College Laboratory Nursery School, Poughkeepsie, New York

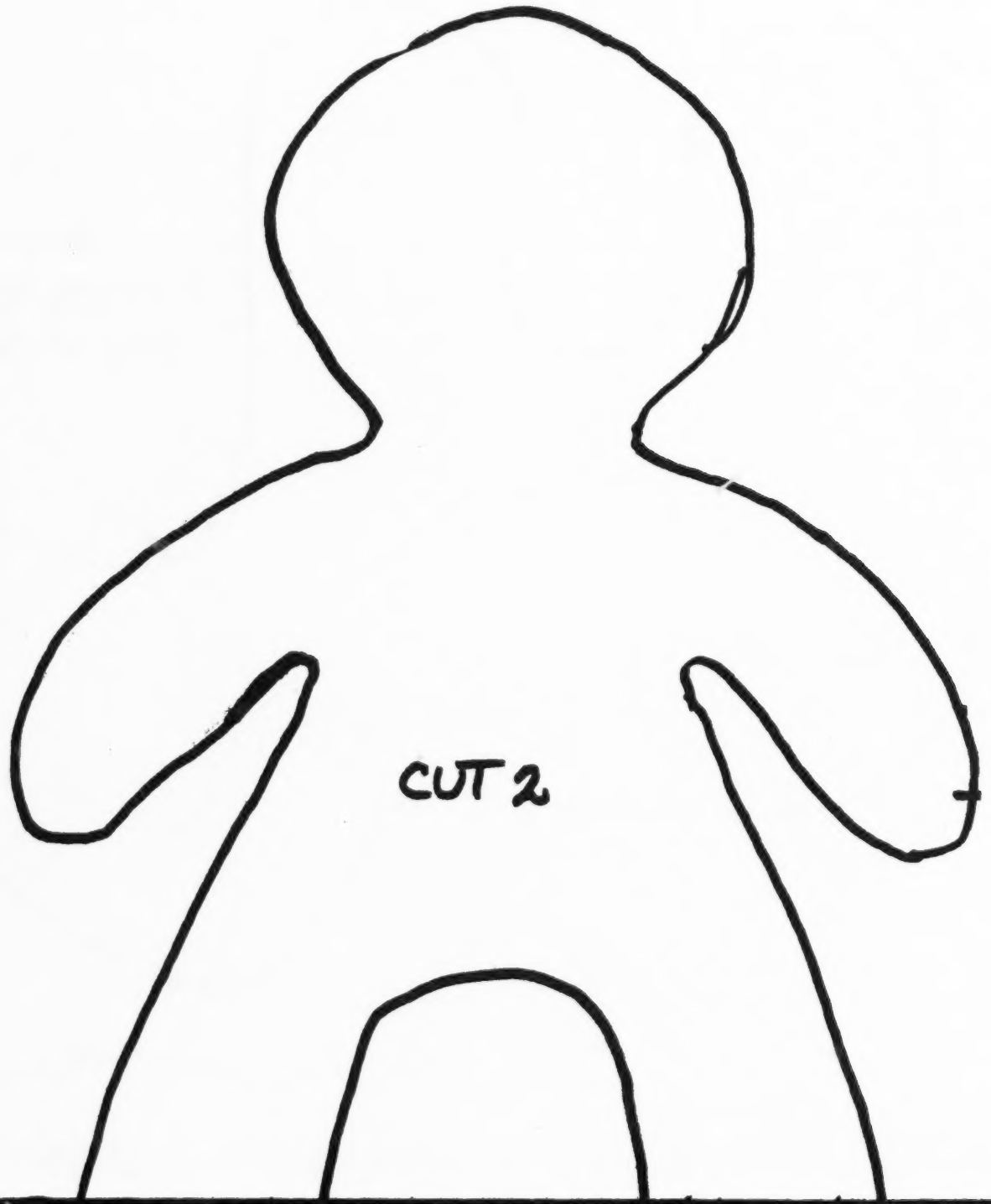


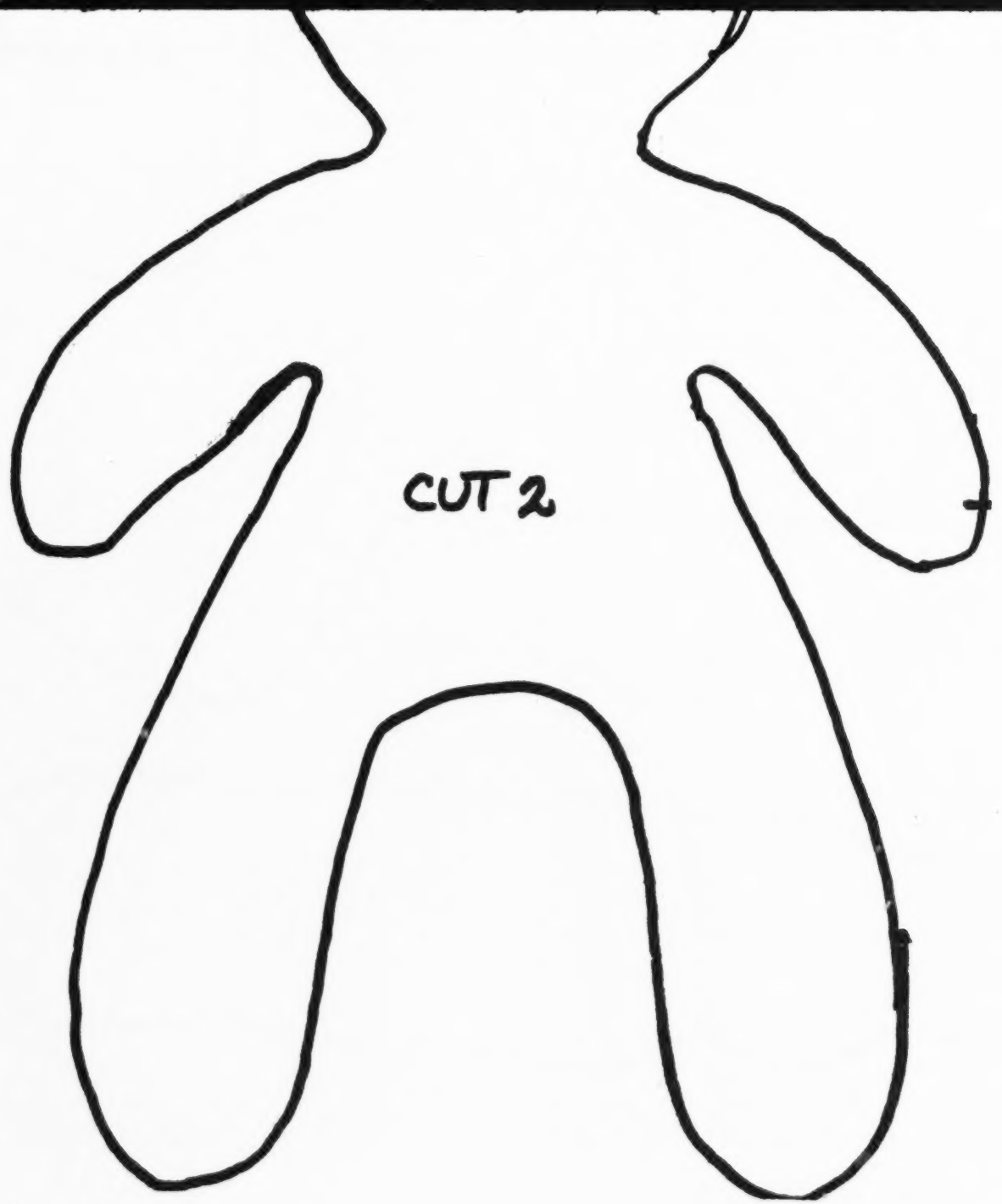
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nurse



Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

Rag Doll
half size



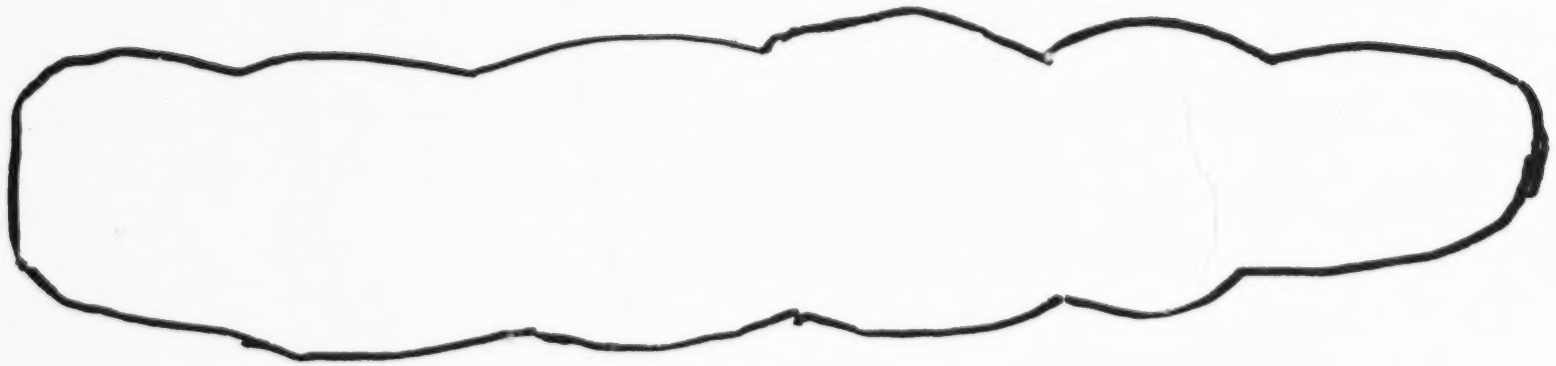


Mattie Mae Brown, Choctaw

CUT 2

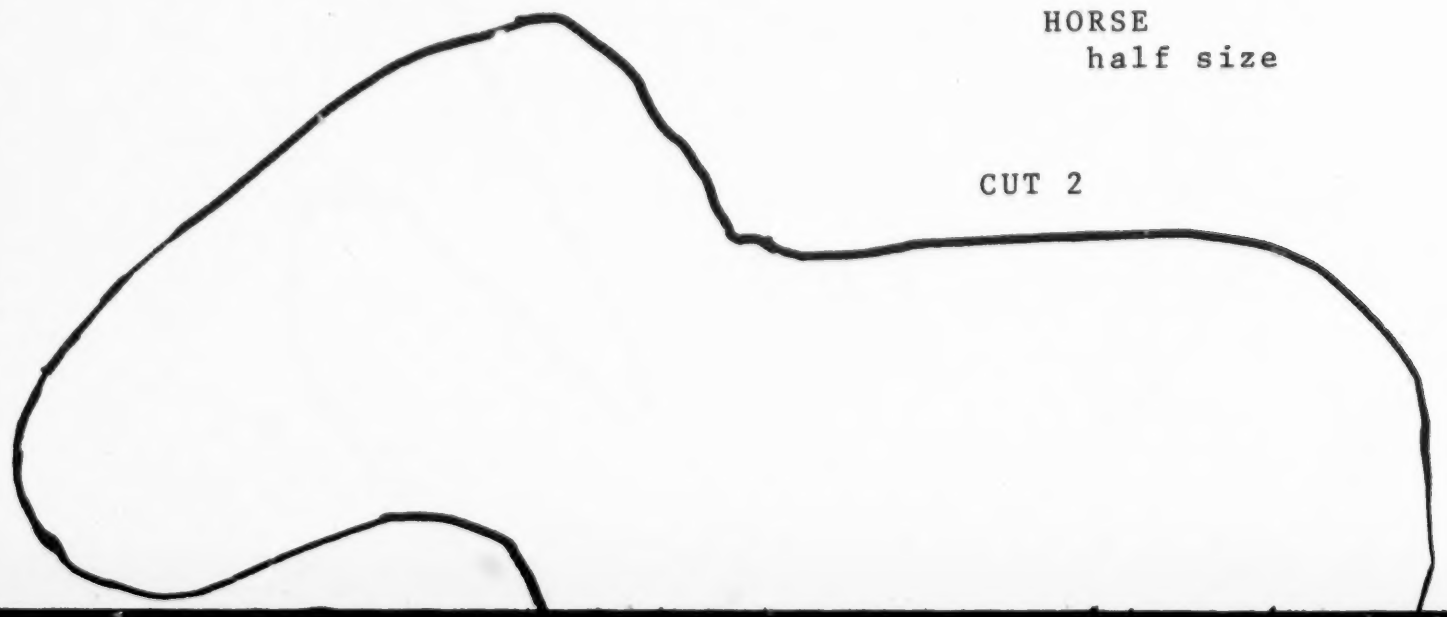
Caterpillar
half size

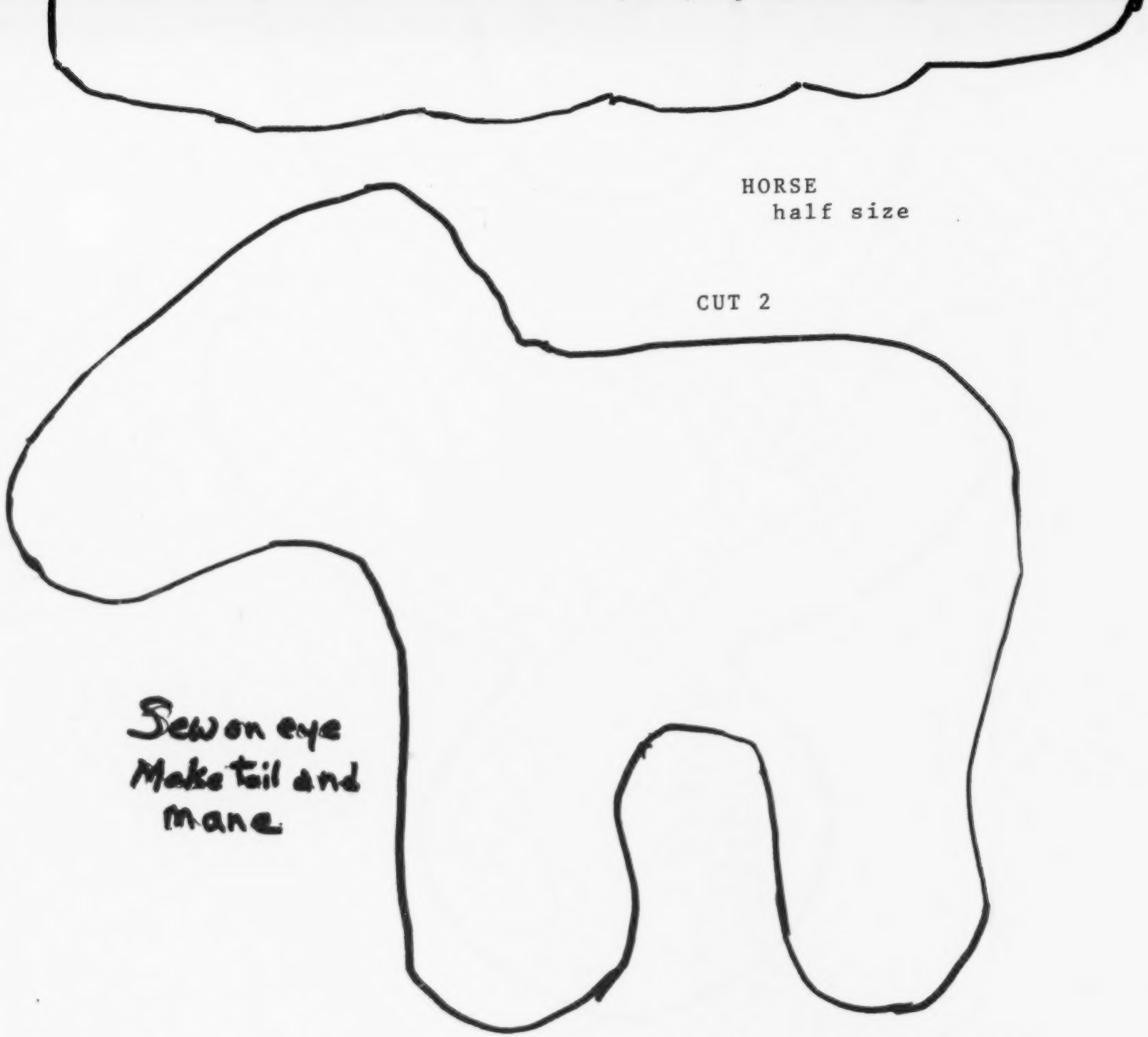
Scale 1/2" = 1 inch



HORSE
half size

CUT 2

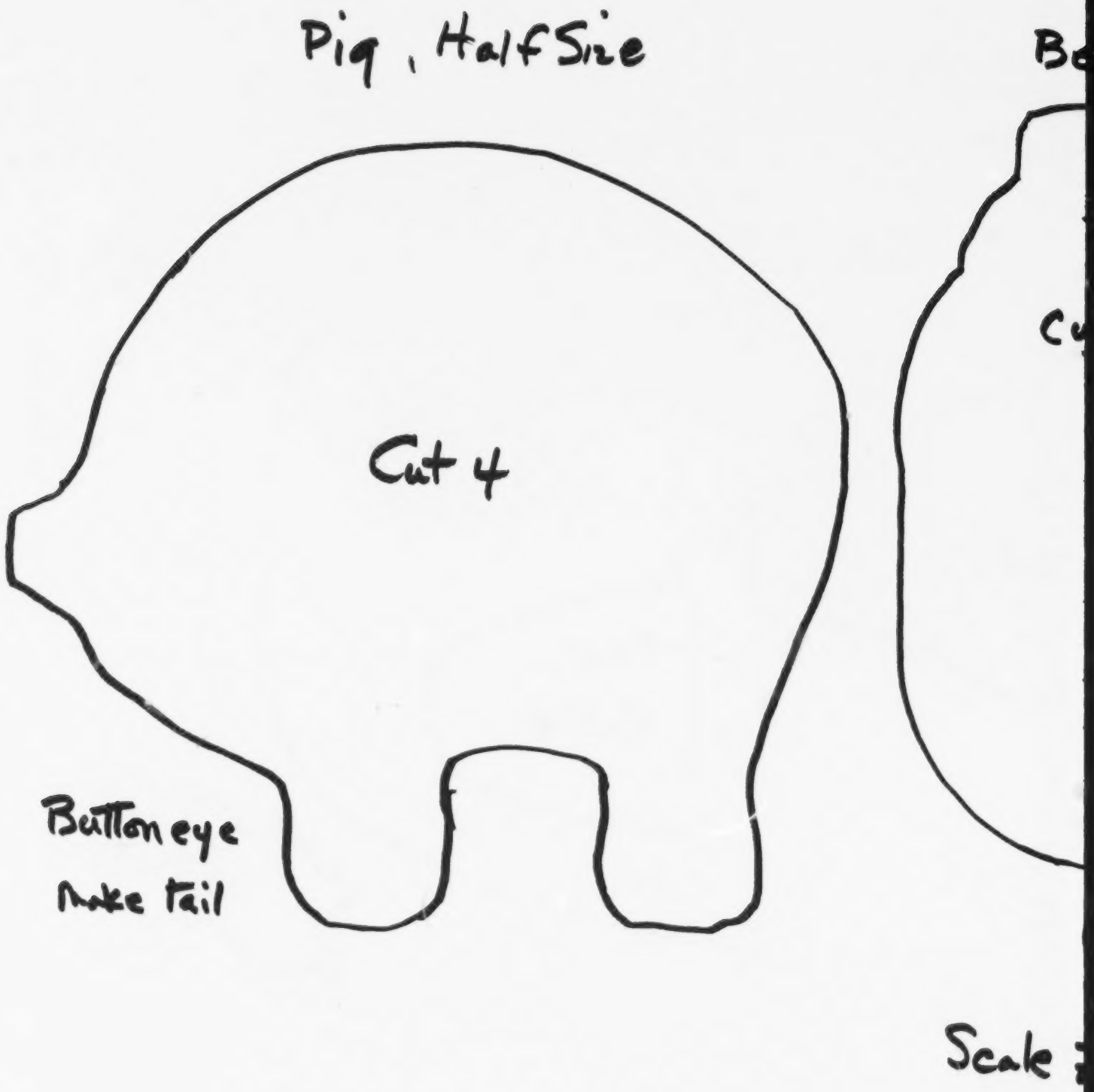




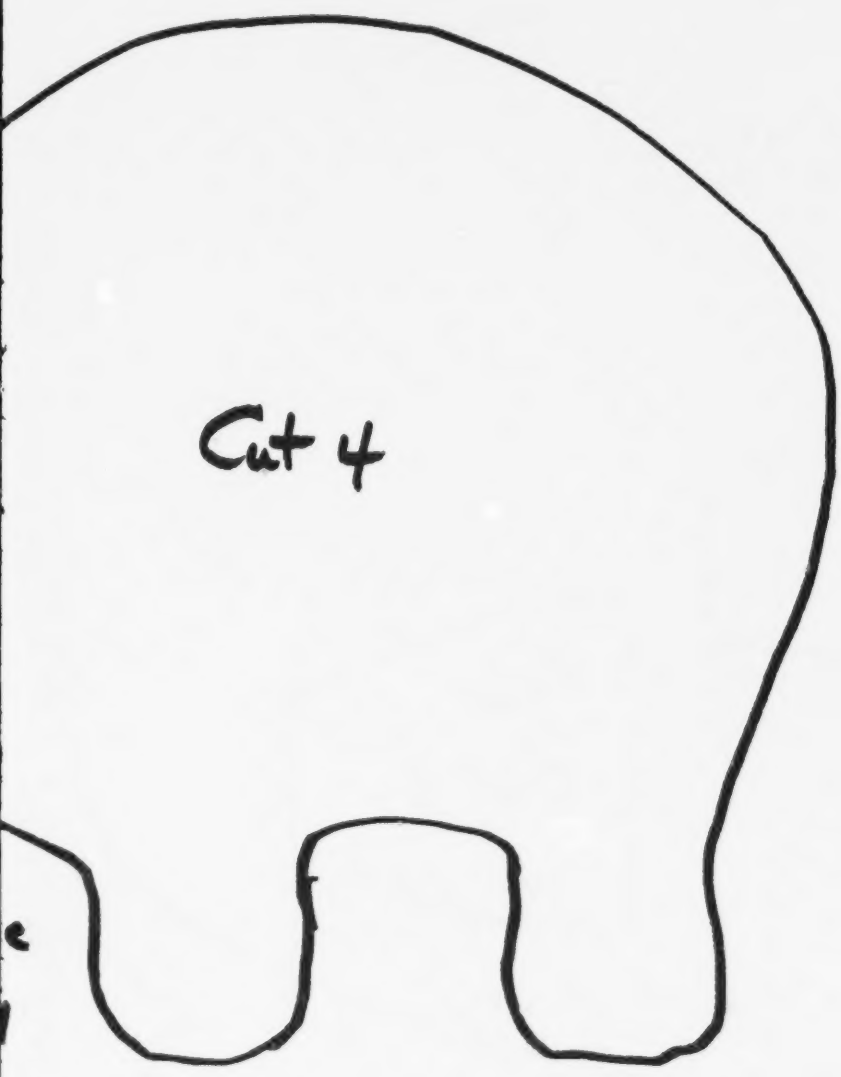
HORSE
half size

CUT 2

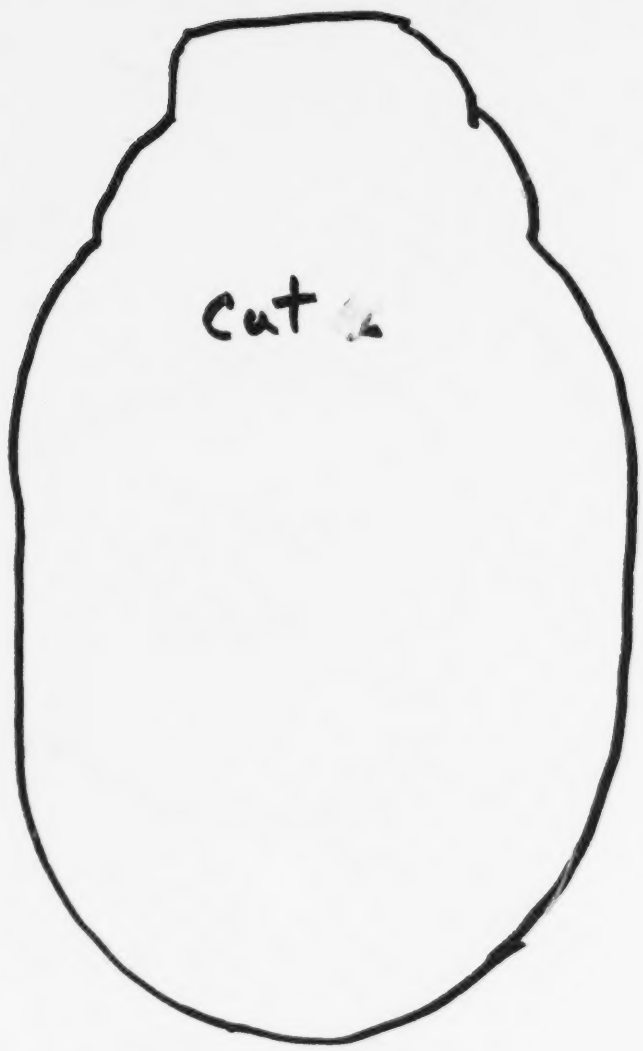
Mattie Mae Brown, Choctaw


Pig, Half Size
Cut 4
Button eye
Make tail
Scale

Pig, Half Size

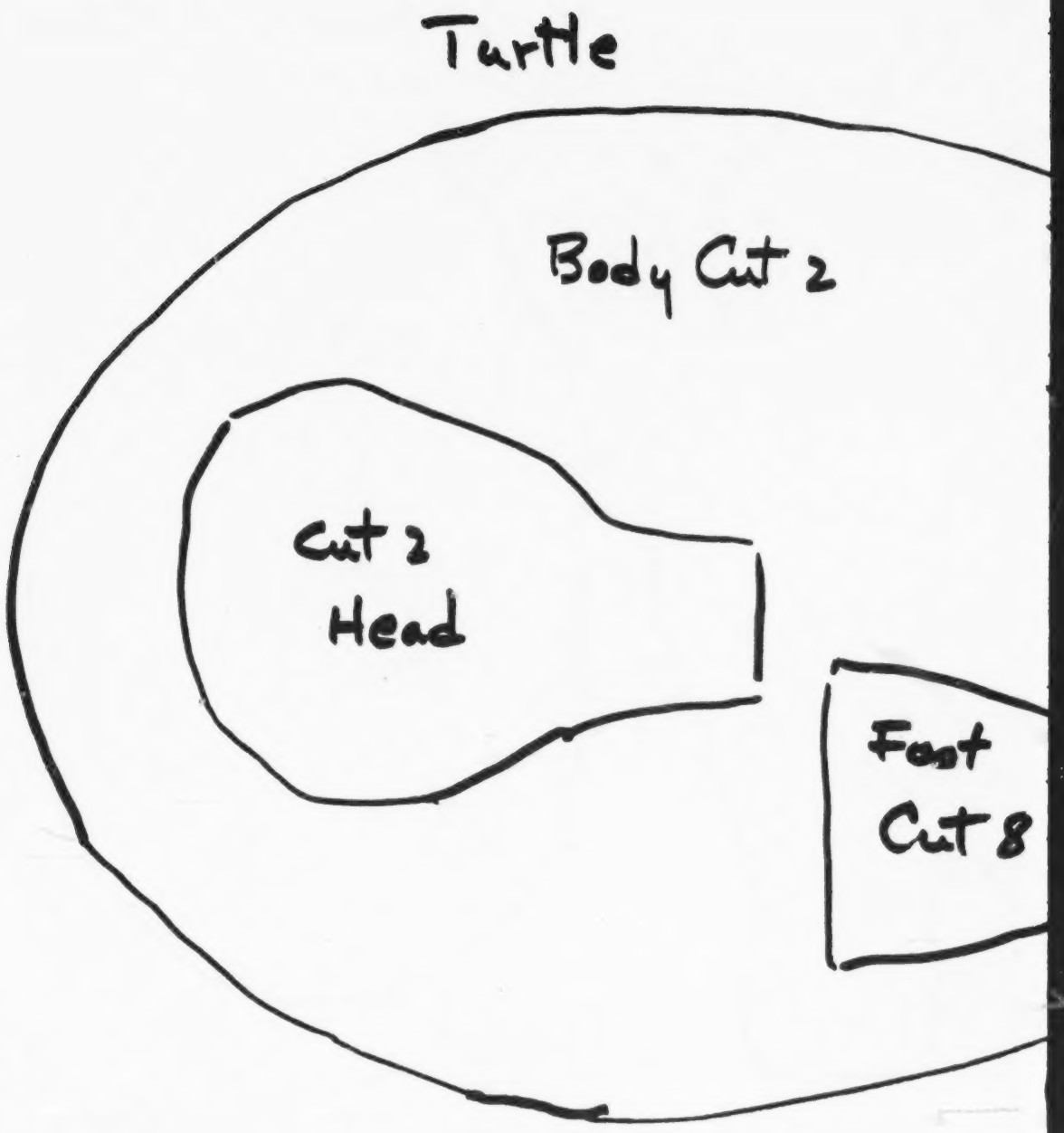


Beetle, Half Size



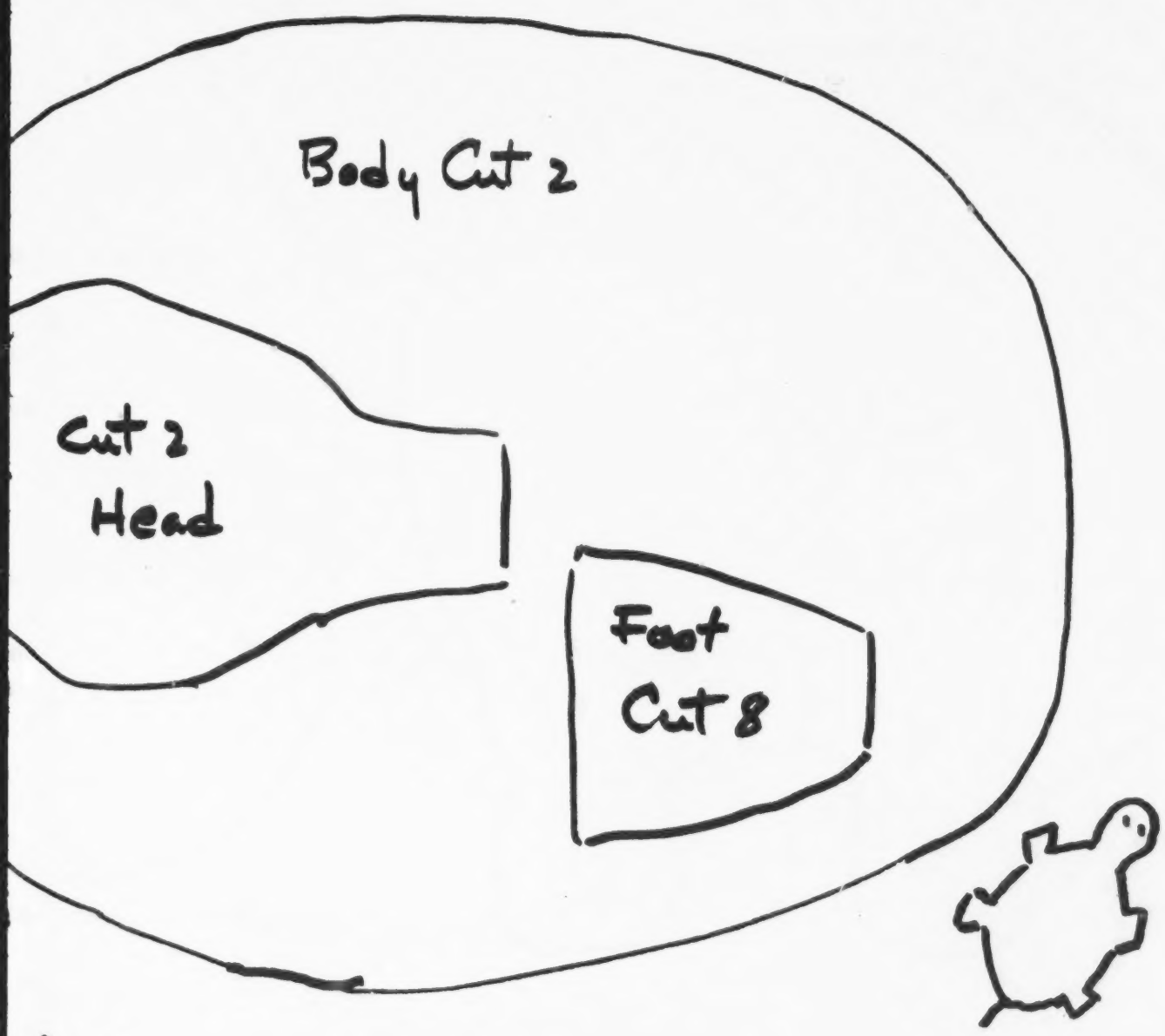
Mattie Mae Brown, Choctaw

Scale $\frac{1}{2}$" = 1'

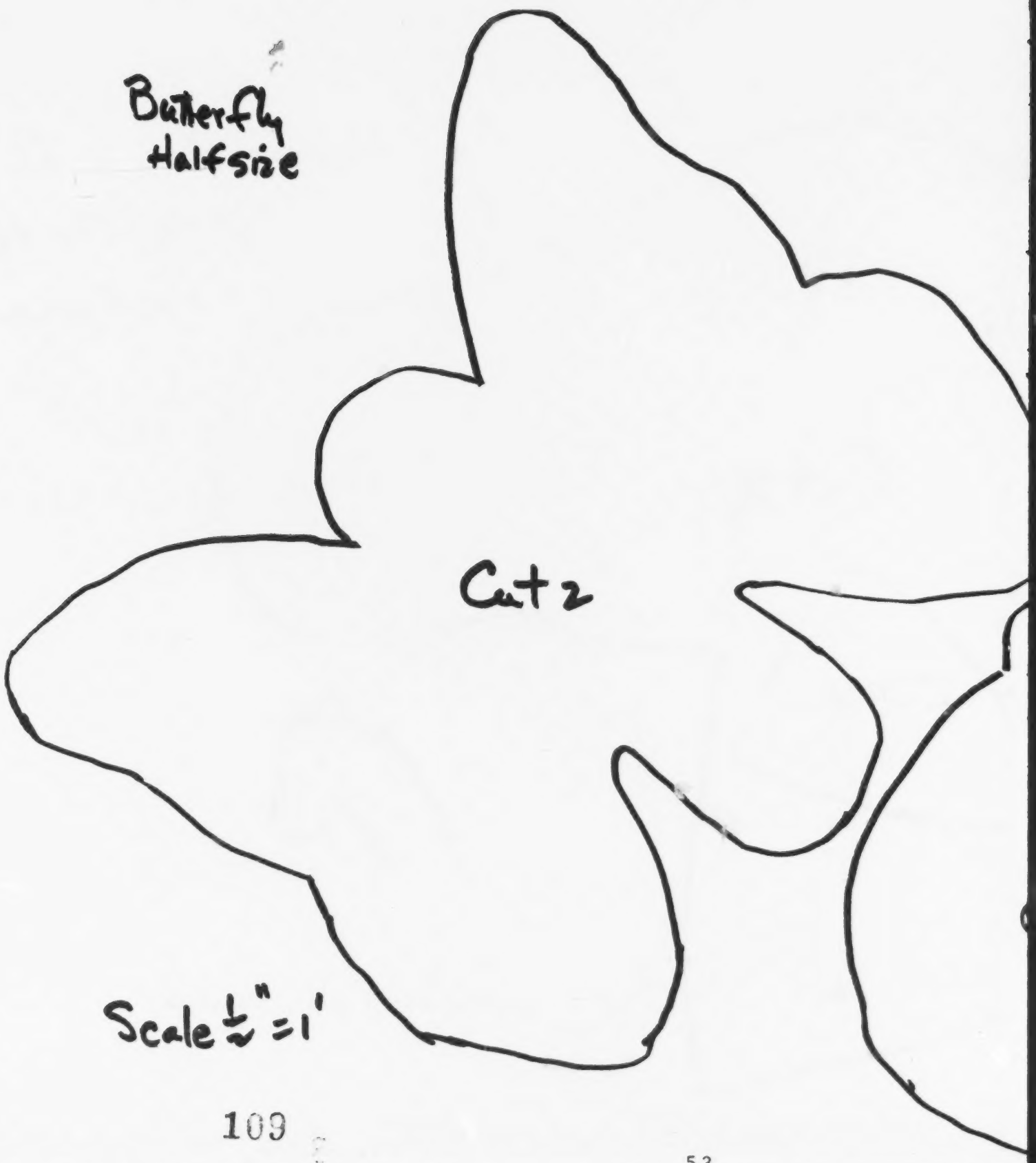


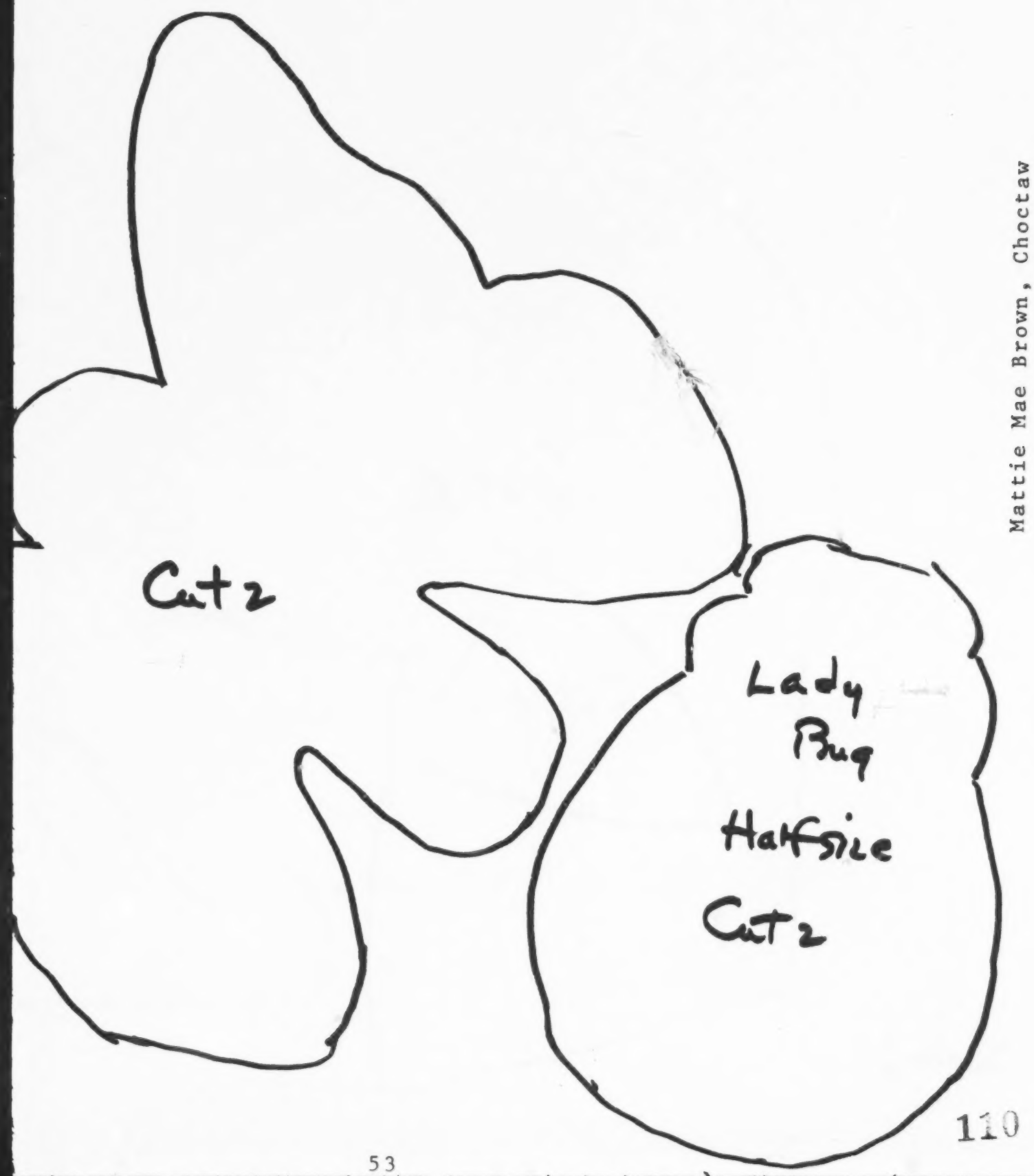
Scale $\frac{1}{2}'' = 1'$

Turtle

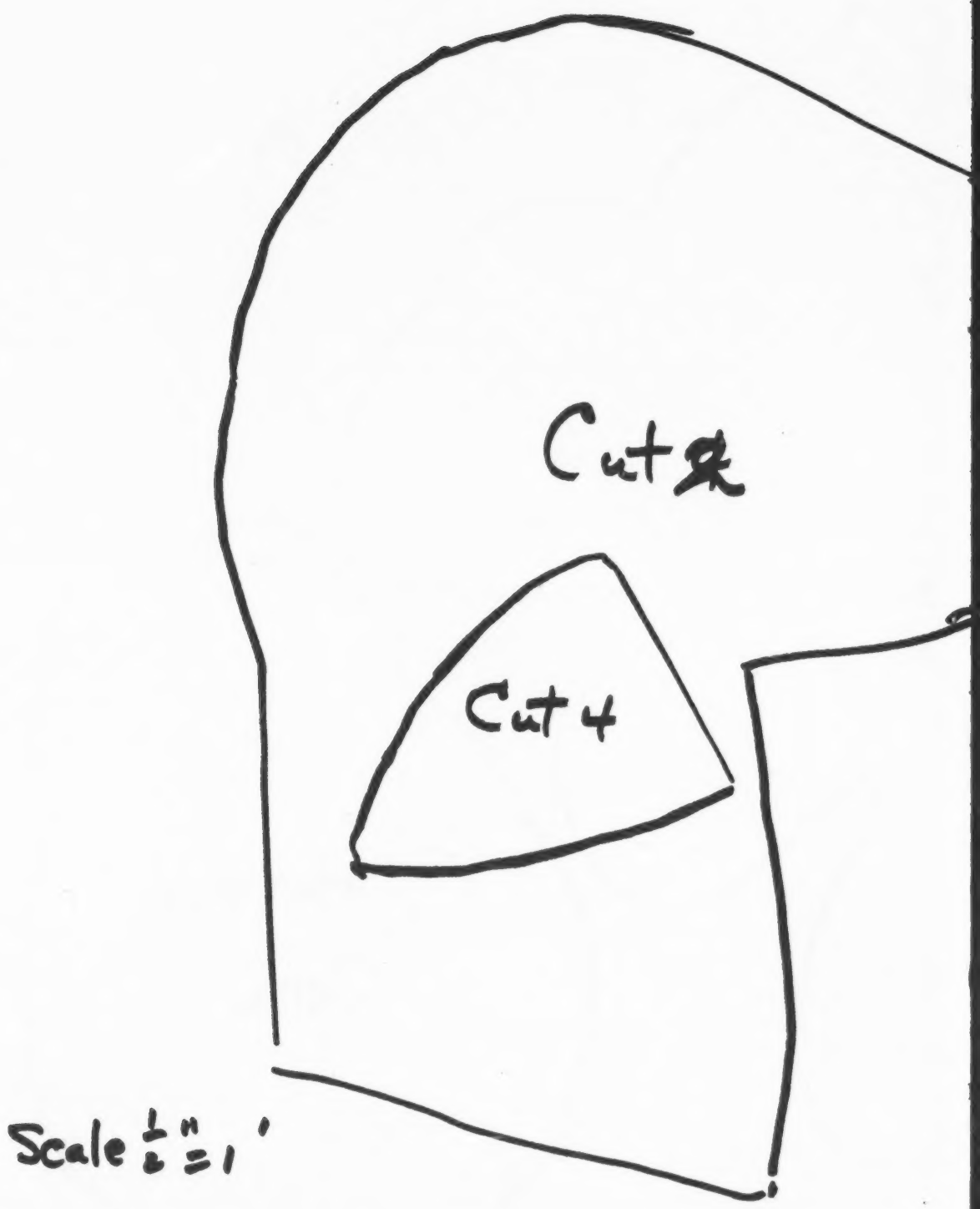


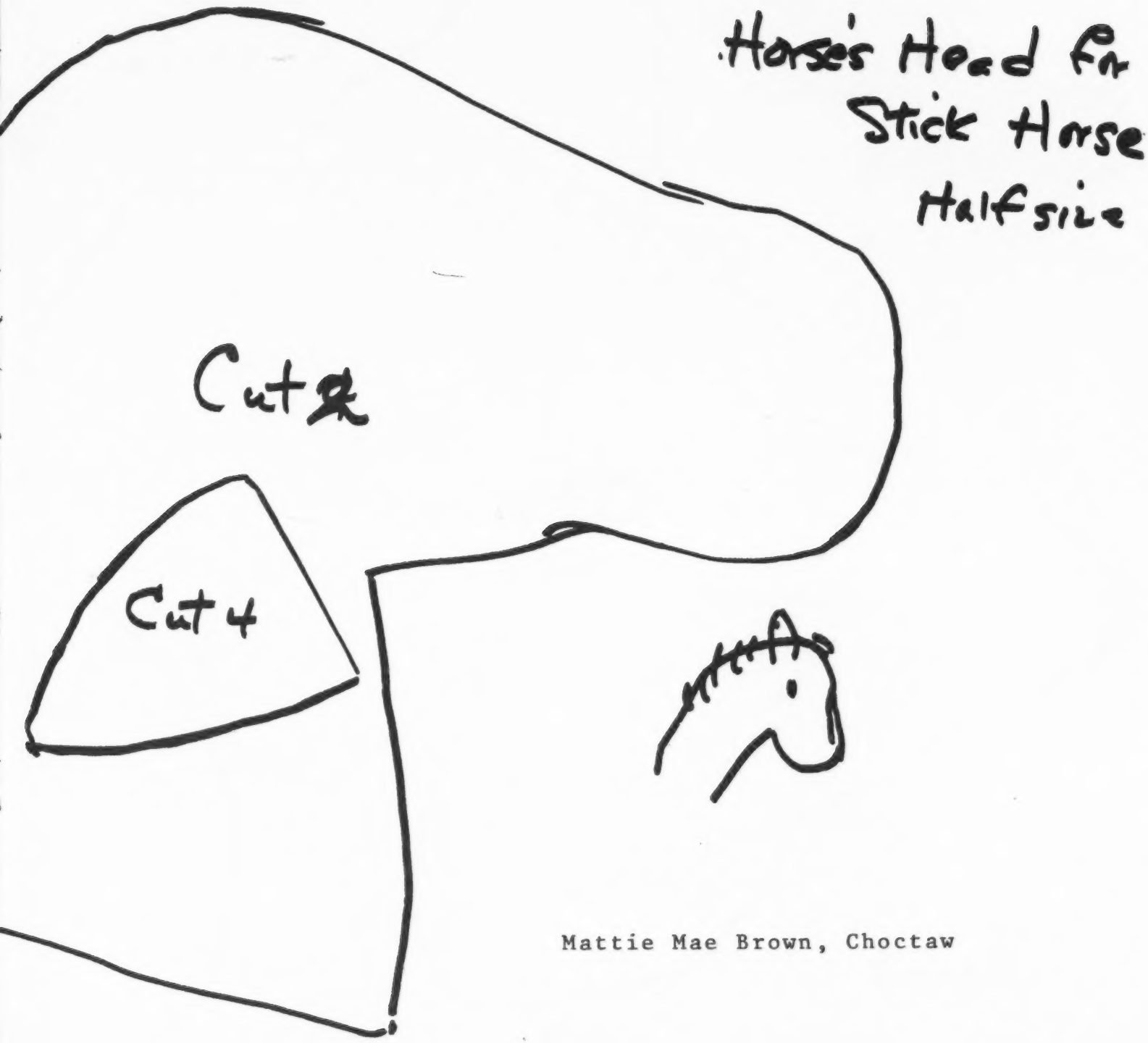
Mattie Mae Brown, Choctaw


Butterfly
Halfsize
Cut 2
Scale 1/2" = 1'



Mattie Mae Brown, Choctaw


Cut 4
Cut 4
Scale 1/2" = 1'



Mattie Mae Brown, Choctaw

LOW BUDGET ITEMS

The following lists contain some materials that are inexpensive and ea
good parent projects, too!

Large boxes, wooden or cardboard, soft drink crates, egg cartons, T.V. boxes
Used pots and pans (can be sprayed with enamel for color) and other kitchen utensils
Magazine pictures (mount on heavy paper or cardboard) and magazines for browsing
Old clocks, scales, radios
Appliances: toaster, iron, waffle iron, etc.; (take out electric unit or cut off end of cord)
Used rubber tires for rolling, jumping on, sitting in (inner-tubes also)
Let children clean and scrub with soap first
Old automobile or boat
Large logs or trunk of fallen tree
Concrete pipe, 36" diameter
Old sheets (easel aprons, doll-bed sheets, capes)
Used toys of all kinds
Spools from thread
Shoe strings for beads
Macaroni for stringing and art use
Food coloring
Old eye glasses with lenses removed
Rope, 2-5" in diameter securely fastened to tree for swinging
Pieces of hose for gas station; oil can; gas station labels, hats, tire pumps
Coffee tins with plastic lids (can be sprayed or painted with enamel)
Plastic soap containers (make funnels, scoops, etc.)
Collection of bolts and screws to fit together
Pets: gold fish, a stray kitten, a tortoise, etc.
Small metal boxes (band aids, slide camera film)

Marbles
Wigs
Indian head dresses
Beans, rice, etc.,
Large rocks (too la upon and feeling
Stepping stones in ing upon and jump
Indoor plants: get and let children fore planting
Wind chimes: inexp make from tin, je
Series of long, low etc. (Wooden and/
Painters' buckets -
Unlabeled liquor bo place on ledge wh
Rhythm instruments,
Large animals or fi riding made from horses
Box of "junk" for t collage
Box of fabric sampl color
"Small bottles," ga cologne, mouthwas empty cologne bot
"Lock box" -- woode latches and locks will open when al been opened.
Bean bags; easy and
Collection of disca such as sifters, suring cups and s

LOW BUDGET ITEMS

contain some materials that are inexpensive and easily obtained. They're
s, too!

or cardboard, soft drink
ns, T.V. boxes
(can be sprayed with enam-
other kitchen utensils
mount on heavy paper or
gazines for browsing
radios
r, iron, waffle iron, etc.;
c unit or cut off end of

or rolling, jumping on,
-tubes also)
and scrub with soap first
oat
of fallen tree
iameter
rons, doll-bed sheets,

ds

ds
ng and art use

lenses removed
er securely fastened to

as station; oil can; gas
ts, tire pumps
stic lids (can be
with enamel)
ers (make funnels,

and screws to fit together
stray kitten, a tortoise,

and aids, slide camera

Marbles
Wigs
Indian head dresses and feathers
Beans, rice, etc., for play house
Large rocks (too large to lift) for sitting upon and feeling
Stepping stones in yard or garden for walking upon and jumping to
Indoor plants: get cuttings from friends and let children watch roots develop before planting
Wind chimes: inexpensive on the market, or make from tin, jewelry, etc.
Series of long, low boxes for train, trucks, etc. (Wooden and/or cardboard)
Painters' buckets - plastic or cardboard
Unlabeled liquor bottles for colored water, place on ledge where light shines
Rhythm instruments, homemade
Large animals or figures for climbing and riding made from paper mache and sawhorses
Box of "junk" for texture, for design and collage
Box of fabric samples for texture, shape, color
"Small bottles," garlic, cinnamon, cloves, cologne, mouthwash, empty condiment boxes, empty cologne bottles and powder boxes, etc.
"Lock box" -- wooden box with variety of latches and locks attached to door, door will open when all locks and latches have been opened.
Bean bags; easy and inexpensive to make
Collection of discarded kitchen utensils such as sifters, dish pans, funnels, measuring cups and spoons, egg beaters, muf-

fin tins, spatulas, etc.
Dried gourds, large and small, for form and color; can be painted
Country mailbox outside nursery
Newspaper (variety of uses in art experiences)
Colorful wrapping paper, ribbons and bows
Mirrors, variety of sizes and locations
Discarded sink for outdoor water play
Flannel boards foruse by teacher and children
Punching bag made from old pair of jeans
Feathers, sheep wool, pieces of fur
Walking or jumping boards, easily made
Canvas, for tent
Aluminum foil pans
Cardboard tubes from rolls of paper
Catalogs (Sears, etc.) (Good for categorizing objects)
Sample drapery, carpet, wallpaper books
Old holiday greeting cards
Silk scarves
Flour, corn meal, grains, etc., to sift, measure and feel. (Don't ever throw away cereals with weevils; send it to school!)
Buttons; sort for size and color; string on heavy thread
Zippers, snaps, hooks, tops of old tennis shoes; mount fabrics on board for manipulation by children
Suspenders
Wood scraps for building
Sawdust
Clothes pins
Empty telephone cable spools (outdoor tables)
Telephone wire (colorful!)
Old furniture: paint with gay colors and use for work areas and storage
3 gallon ice cream containers
Ceramic tiles (and pieces of tile) from tile shop
Scrap paper from printers (all colors and sizes)
Paint color swatches from paint store

SOME SOURCE
EQUIPME

Your Indian Communi

Brunswick
Kalamazoo, Michigan
Telephone - 616-349

Childcraft Equipmen
155 East 23rd Stree
New York, New York
Telephone - 212-674

Community Plaything
Rifton, New York 1
Telephone - 914-658

Creative Playthings
Edinburg Road
Cranbury, New Jerse
Telephone - 609-448
or
5757 West Century B
Los Angeles, Califo

Greene Wood Product
47-07 Vernon Boulev
Long Island, New Yo
Telephone - 212-ST6

Zia School and Offi
Second Street
Albuquerque, New Me

Milton-Bradley Co.
Springfield, Mass.

Hardware, Stationer
Stores

Much is available t
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SOME SOURCES FOR PURCHASE OF EQUIPMENT AND SUPPLIES

Your Indian Community

Brunswick
Kalamazoo, Michigan
Telephone - 616-349-1521

Childcraft Equipment Co., Inc.
155 East 23rd Street
New York, New York 10010
Telephone - 212-674-4736

Community Playthings
Rifton, New York 12471
Telephone - 914-658-6561

Creative Playthings
Edinburg Road
Cranbury, New Jersey 08512
Telephone - 609-448-2221
or
5757 West Century Boulevard
Los Angeles, California 90045

Greene Wood Products
47-07 Vernon Boulevard
Long Island, New York 11101
Telephone - 212-ST6-5699

Zia School and Office Supply
Second Street
Albuquerque, New Mexico

Milton-Bradley Co.
Springfield, Mass. 01101

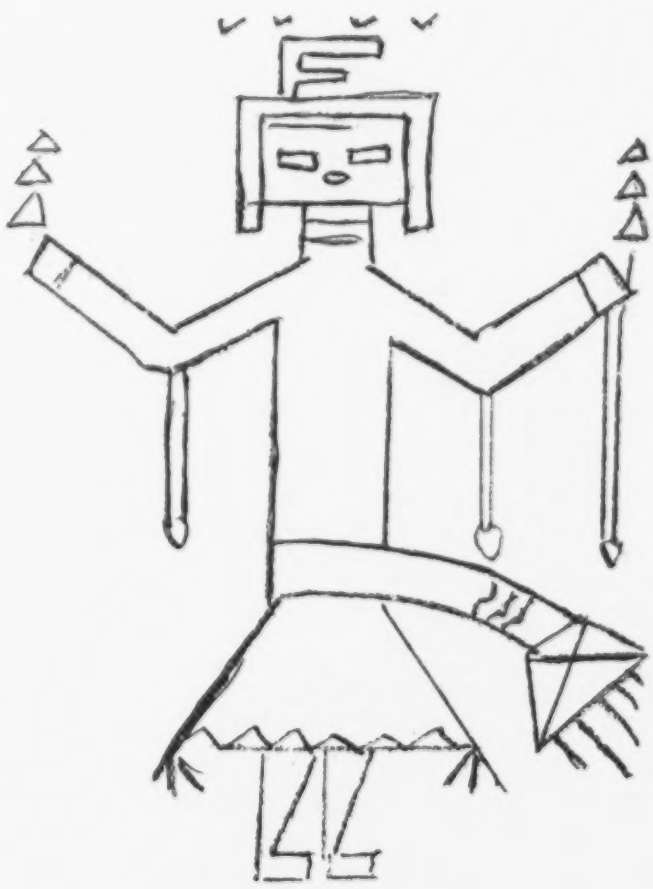
Hardware, Stationery, 5 cents & 10 cents Stores

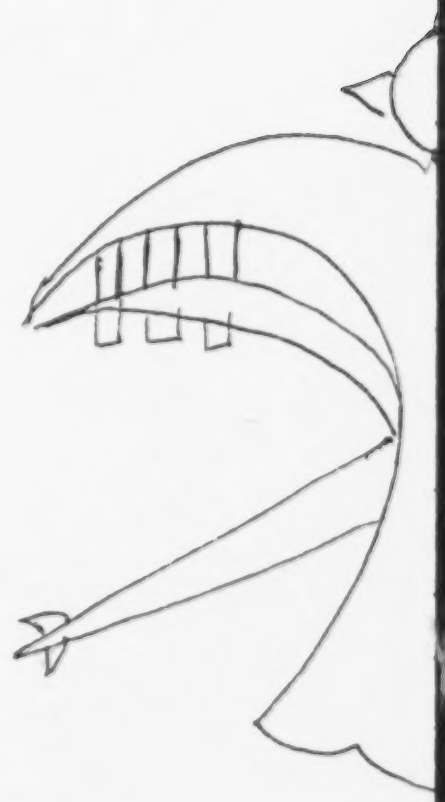
Much is available through army surplus depots if you can arrange to get it.

SOME SOURCES FOR SECURING "BEAUTIFUL JUNK"

Your Environment

Millwork and Lumber companies, grocery stores
Telephone company, soft-drink companies
Ice cream stores, gas stations and garages
Wallpaper stores, carpet shops, tile stores
Boat Rentals and Marinas, moving companies
Print shops, fabric departments, home.





ECURING "BEAUTIFUL JUNK"

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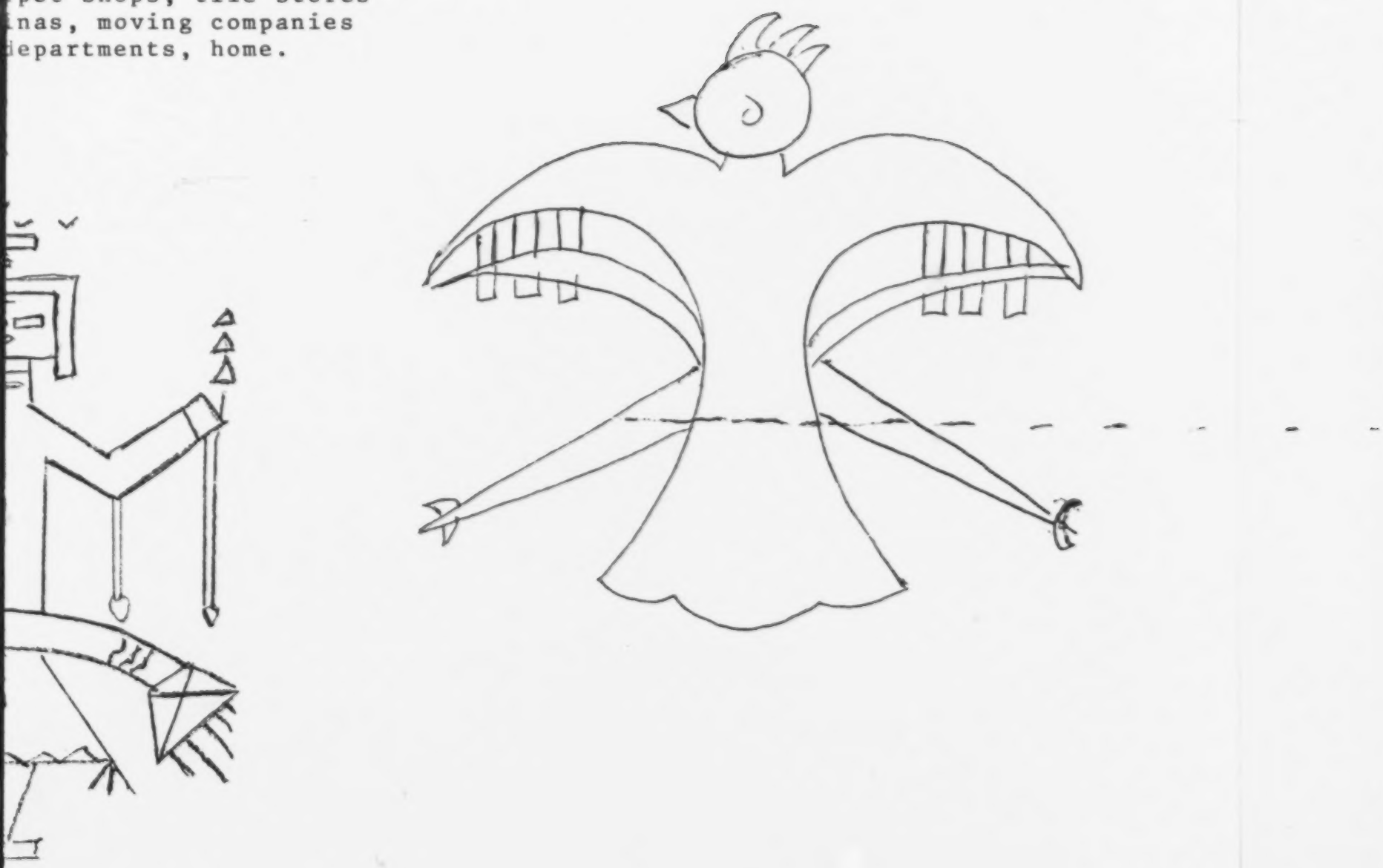

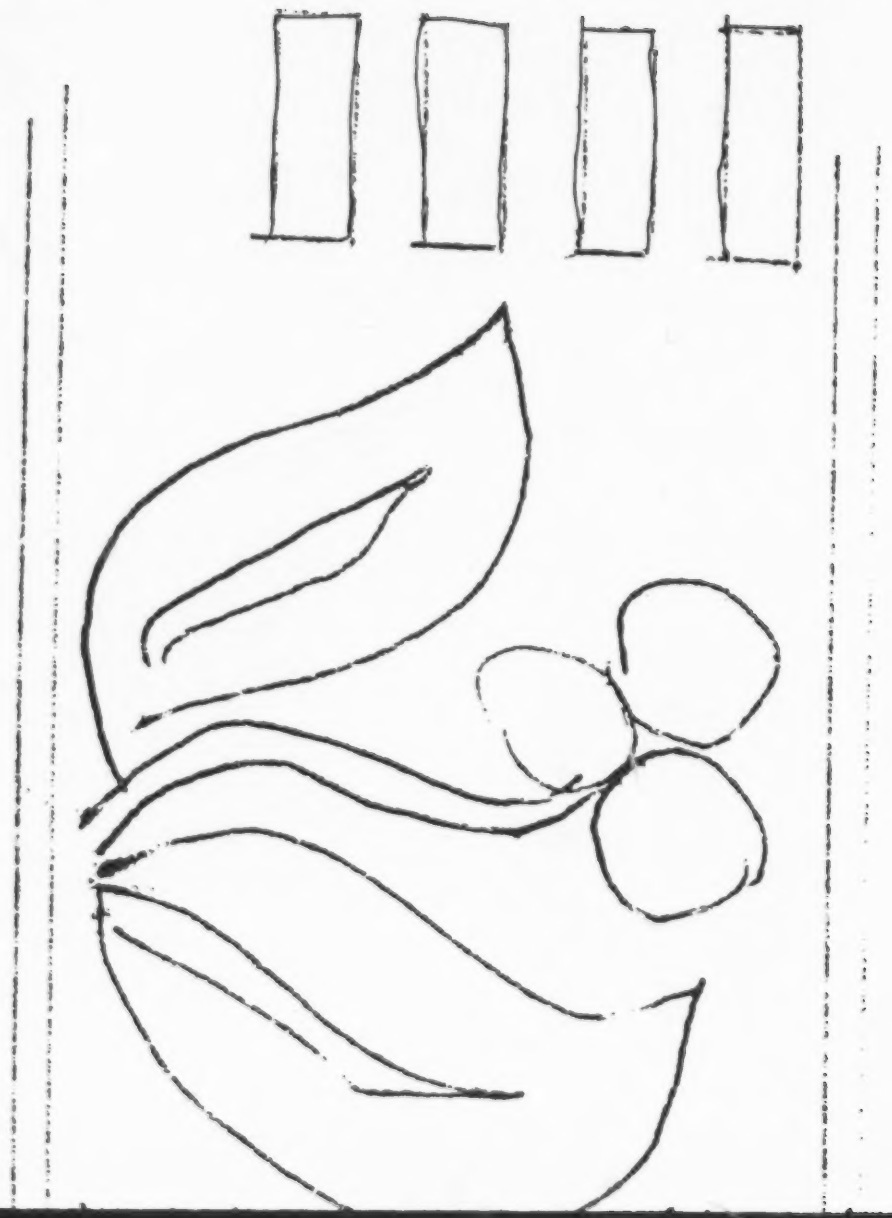

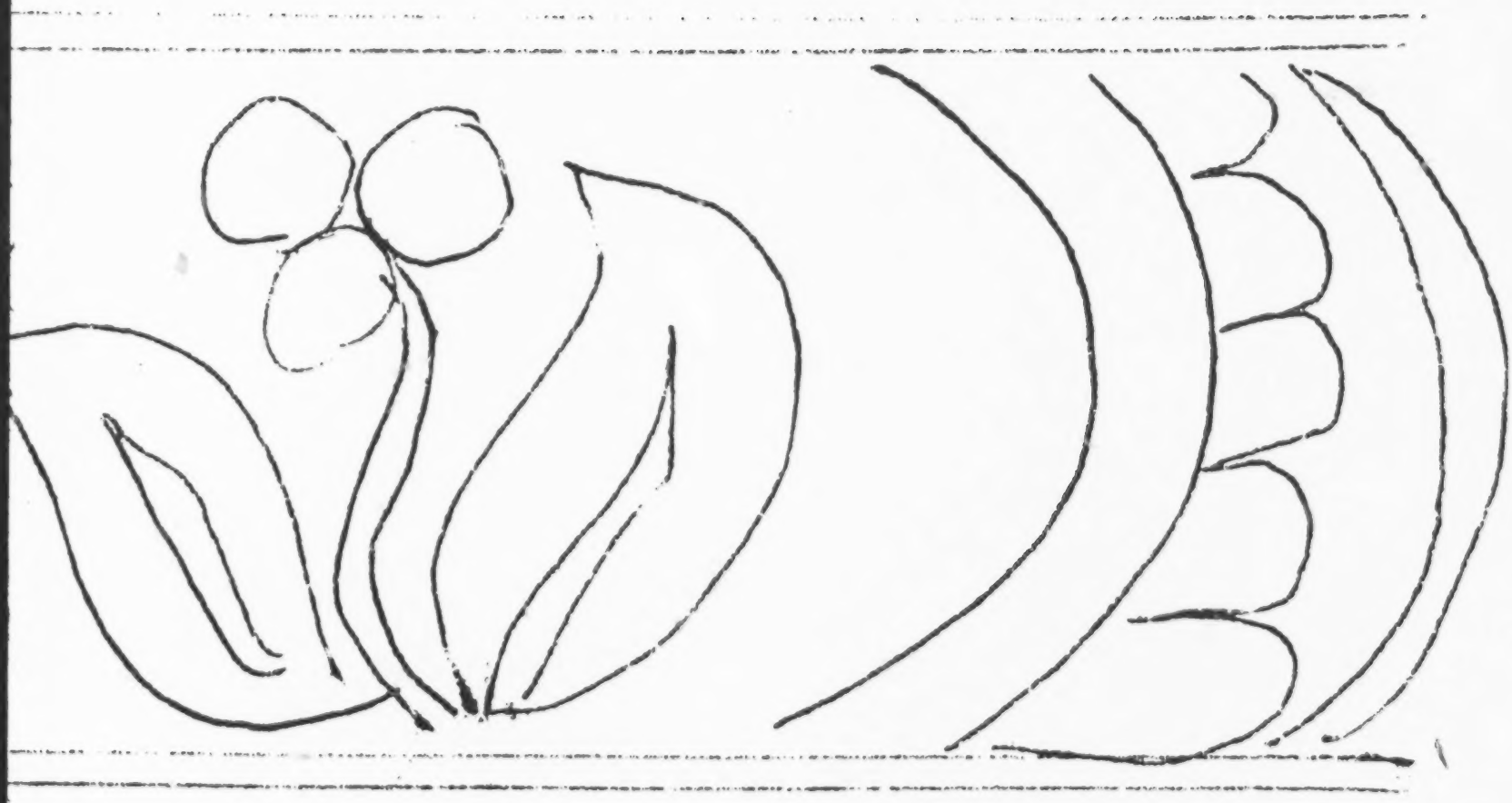

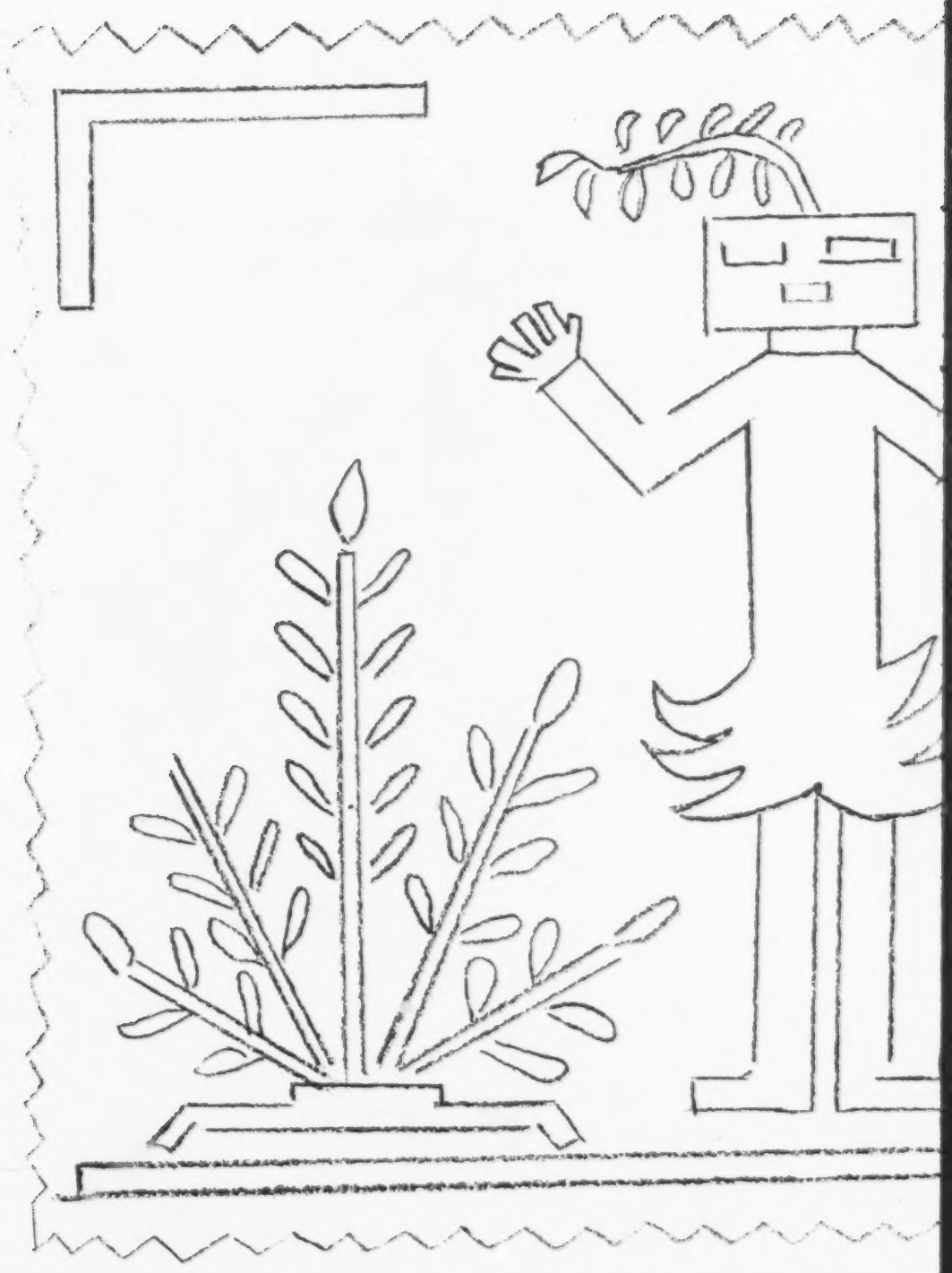

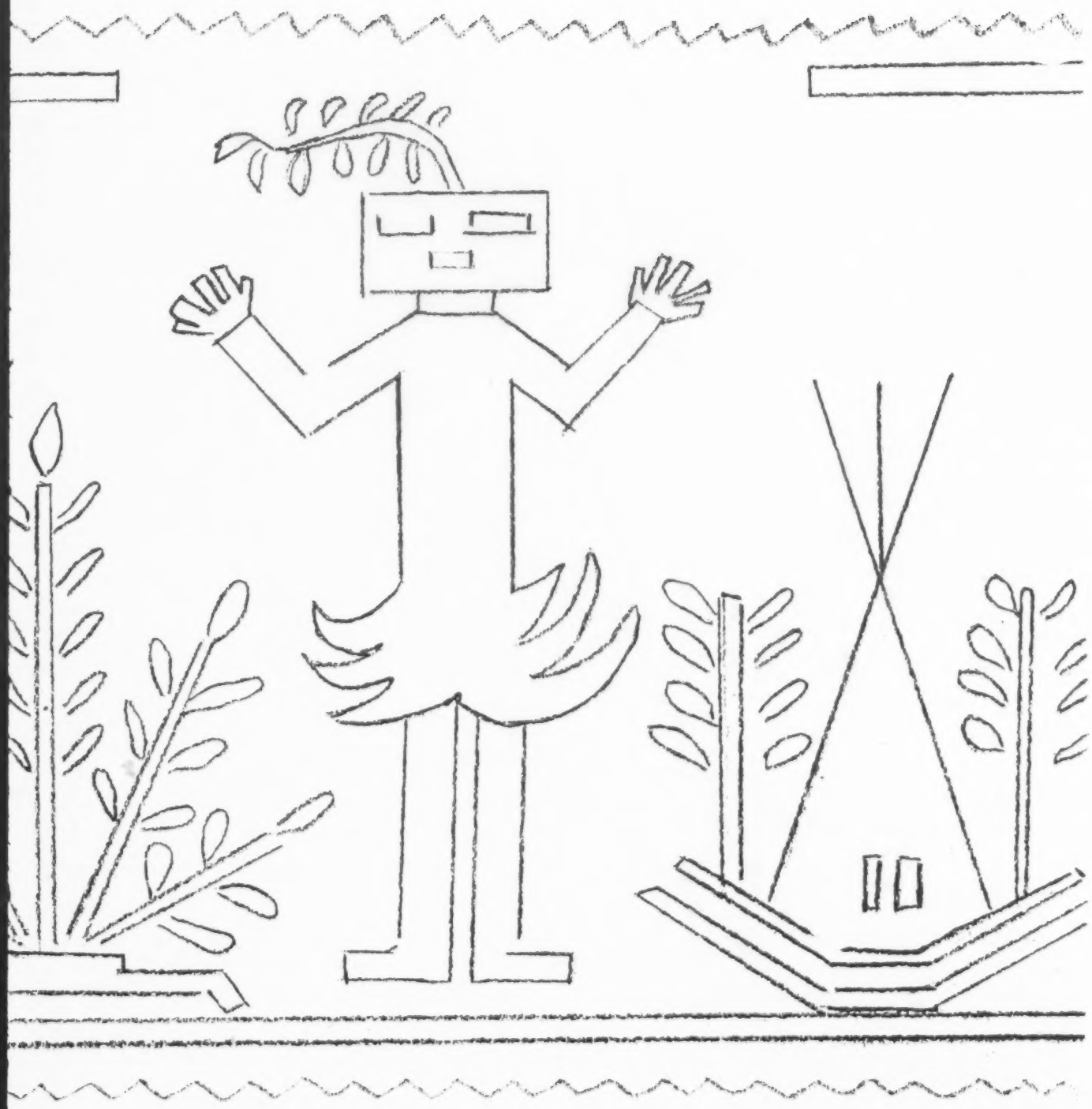

LANGUAGE AND CONCEPT DEVELOPMENT THROUGH CU

The new kindergarten classrooms offer an exciting challenge in bilingual education to the teacher. Though the use of native Indian languages varies from community to community, basically a modern kindergarten for Indian children is centered upon two languages. There is often much disagreement among experts as to the most effective ways of introducing a second language to a young child while strengthening the use and full development of his native tongue. But all specialists stress the crucial years from 4-7 as basic to the development of communicative competence in the adult. The major overall goals in this context are as follows:

1. The development of the mother tongue for the purposes of communication, learning, problem-solving and fantasy.

2. Selective introduction and/or development of existing skills in the national language. An individualized approach is recommended.

Language plays a crucial role in communication as well as in the development of learning and thought processes. Children who are shifted from one language to another without the opportunity to effectively learn the use of language for varied functional aims, often remain "illiterate in two languages." To avoid such a hazard, teachers and aides are urged to become familiar with the use of language by the Indian community and with the resources currently being developed among different Indian tribes. (For instance, the acquisition of literacy skills in Navajo by an increasing number of aides and teachers at the Navajo Community College is one such opportunity.)

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A. Children living in isolated communities consisting of predominantly non-English speakers should have a curriculum primarily in their native language.

1. The use of the mother tongue for communication and learning implies the preparation of materials in the native language as well. Indian children appreciate deeply the few materials which are available in their native tongue. (Lists of these materials are available from the BIA and the American Association on Indian Affairs; see also the bibliography in the Appendix.)

2. The teacher who does not speak the native language has the difficult job of learning to communicate non-verbally. Through this process, however, she learns to accept the children's own ways of conveying their needs and feelings to her by the languages of vision, motion and touch.

3. The introduction of the English language should be based upon the level of language development of each child in his native language. We prefer language development experiences instead of ESL for the kindergarten child. (See specific suggestions in Suggested Activities to Increase Language Power.)

4. The Indian teacher or aide in these classrooms is the one who can communicate with the children in their native language and thus, becomes the pivotal individual. Cooperative planning between the Indian and English-speaking staff members is of the essence.

B. Children living in mixed communities should have a curriculum in both languages.

1. The development of the mother tongue for all children who come to class speaking it, and the availability of experiences in the Indian language for children who have limited knowledge of it.

2. The sequential introduction of the English language for all children based upon an approach of individualized instruction. (See specific suggestions in Suggested Activities to Increase Language Power.) The role of child-to-child interaction is particularly important in a heterogeneous classroom; therefore, many opportunities for this kind of activity should be provided.

3. The concern expressed by many teachers for shaping the Indian child's grammar and pronunciation in the direction of Standard English is understandable. Our approach, however, suggests the importance of modeling (i.e., exposure to clear, child-directed, interesting language in stories, dramatic play, songs and conversation) instead of formal exercises or the correction of "grammatical and pronunciation errors."

C. Children living predominantly in English-speaking communities with a past history of Indian languages having been spoken.

1. The relationship between the cultural and linguistic aspects of the program in this kind of community is particularly important. The exposure of children to traditional songs, music, and older members of the community who still speak the language is recommended.

2. The development of skills in the English language from a functional point of view (i.e., children learn to recognize that through the use of language they can affect their environment in a powerful way.) We recommend

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a child-centered approach instead of a preoccupation with politeness and correct usage.

3. Opportunities to use the child's language for learning and problem-solving. (See specific suggestions in Suggested Activities to Increase Language Development.)

The development of language can be thought of as a unitary process, as the child's increasing reliance upon words, in addition to his communication by means of motion, touch, gestures, drawings and dance. However, in the planning of curriculum it is helpful to look at different components of languages. The following listing of aspects of language is relevant to development of the child's native language as well as to his acquisition of a second language. In all instances, the child from the bilingual and bicultural environment needs a particular sensitivity to the medium of words; this sensitivity is required because of the many conflicting demands with which he is confronted in school and in his community.

The four aspects of language to be included in a kindergarten program are: listening, sound production, the development of fluency, and sematic development in the context of the development of language for thought.

Listening: The objective in developing listening skills in bilingual children is to help them focus on and sustain a tenacious attention to sounds. Many children raised in rural environments have learned to discriminate among certain sounds of nature and to interpret them. This is an important basis from which to move to fine auditory distinctions in words. For instance, children tend to pay more attention to beginning rather than to the end of words; listening

games using natural and musical sounds can help them focus their attention on different segments of continued patterns of sound.

In addition, the matching of sound to sight is a critical skill being developed in these early years. The sensory integration of visual and aural patterns has been found to constitute an important prerequisite to reading. Matching games of sounds and pictures can strengthen listening and sensory integration.

Sound production: When learning to speak children constantly shift from listening to speaking; basic to the process of speech is a curiosity about the way sounds are made. One of the objectives of a kindergarten language program is to develop in Indian children an ease in imitating sounds; the use of instruments is one major avenue for accomplishing this aim.

Increasingly, psychologists and linguists believe that much early learning consists in the development of generalizations. For instance, the difference between low and high sounds can be shown by the tightness of a wire or string, similar to the tightness or laxness of muscles during sound production. Languages differ in this respect; in Navajo, for example, shoulder muscles as well as sounds, while in English shoulder muscles are seldom used. Teaching-learning games of sound production (as in the production of the th sound) can be developed with the help of feathers and mirrors, giving the child an opportunity to watch the impact of streams of air, or to observe the placing of the tongue between the lips when producing a sound.

Teachers may wish to draw up a checklist of substitutions and errors of omission characteristic of the children with whom they work.

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Such a checklist would serve to discourage teachers from the often unconscious tendency to correct children's speech - a harmful practice. Instead, by helping the teachers develop a sensitivity to the regularties in the speech of their children, this close observation may lead to a knowledge of how to stress certain sounds in their own speech, and most importantly to understand more of what the children in their classes are saying.

The objective, then, of developing a program in sound production is to dramatize to the children how sounds are made, not to correct the speech of kindergarten students.

<u>The development of fluency</u>: Many teachers in ghetto and reservation schools are concerned with the "problem of the silent child." Such children can be found in many communities where the home language and the school language are different. It is particularly important to give the shy, quiet child a chance to hear and communicate in his native language. I would like to suggest that <u>language and library corners</u> be set up in the kindergarten classrooms, similar to block and dress-up areas. In these areas, materials in the child's native language would be made available (Particularly in classrooms where not all children come from a non-English speaking home.) If only a minority of children speak an Indian language, the availability of resources such as taped stories would help community aides in working with the child in his native language.

The greater the leap from home to school, the bigger the geographic and emotional distance, the less likely the children (even if they are not bilingual) will enter into verbal exchange with their teachers. Therefore,

teachers need to know how to develop the skills of responding to the non-verbal efforts at communication on the part of young children.

The goal of verbal fluency is to add to the child's non-verbal ways, skills which will enable him to convey to others what he wants and how he feels and also allow him to reshape and re-experience his own experiences which may become less painful, or more poignant, when savored once more by means of words. Novelty of experience does not usually lead to verbal expression on the part of young children. It is for this reason that the emergence of verbalizations accompanying action, ritual or familiar play is of such importance.

Specific activities for the development of fluency in the child's dominant language (i. e., the language which he uses spontaneously for communication) include "meal-talk," story re-telling and dramatic play.

(a) Meal-talk. The physical proximity of teachers and children at meal-time allows for casual, but at times repetitive, conversation. Some teachers use this setting for conceptual training as well: talking about solid and liquid foods, different colors, etc. Questions such as, "Who is sitting with us today?" "Who is wearing a red sweater today?" allow for the repeated use of a sentence frame while changing individual words. This type of verbal interaction in the child's native language can easily be transferred, at a later stage, to learning experiences in a second language.

(b) Dramatic play. The imaginative teacher can capitalize on children's experiences for dramatic reenactment. Settings that children are familiar with (stores or trading

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posts) lend themselves particularly well to these kinds of language experiences. Dramatic play does not have to become a spectacle for the whole classroom; children who seem particularly interested in this kind of activity can be invited first to play with the props; others may or may not follow suit. In dramatic play children have a chance to re-shape their experiences into their symbolic idiom, which may consist of verbal or non-verbal language, and even, at times, of bilingual dialogue.

(c) Story re-telling. Teachers and aides can be trained to read stories in an Indian language to children, though the book in front of them is in English. While there is a shortage of materials (and individuals who can read in their native Indian tongue) this method of translation is an adequate substitute. For story re-telling activities, we would like to recommend the purchase of multiple sets of illustrated books for young children. One set of illustrations should be mounted so that children can handle these while the stories are being read to them, and once they re-tell the story by themselves. (For further details on this method of language stimulation, see John, V., Horner, V., and Berney, T., "Story-Retelling: A Study of Sequential Speech in Young Children," to appear in Levin, H., Basic Studies in Reading, Basic Books, Inc., 1970.) In giving children the opportunity to re-tell stories in small groups, pairs, or individually, the teacher can monitor the child's growth in language during the kindergarten year.

The cameras which have been made available to the kindergarten teachers should give them the opportunity to photograph those experiences around which group and individual stories can be built. In classes where some

children speak an Indian language and others speak English, the stories can be recorded bilingually.

Sematic development: The most significant aspect of language acquisition is the learning of word meanings. One way to think of this process is to conceptualize a gradual shift in the child's use of single labels to words signifying categories of objects, actions and attributes. In other words, while at first children learn the names of certain favored objects, as they grow older, their language reflects their recognition of commonalities of features among a variety of objects and events. They learn to generalize through and with words, and also to become more precisely specific. These very same psychological processes -- generalization and discrimination -- are basic to problem-solving.

Children learn to use language in problem-solving at an accelerated pace during the ages of 4-7; children who are exposed to conflicting language pressures have a particularly difficult time in developing this function of language.

It is for this reason that an increasing number of educators and psychologists urge that the mother tongue should be the language of instruction for young children.

Teachers who do not speak the native language can prepare certain games, with the help of their aides, aimed at sematic development and the use of language for problem-solving. One of the most difficult concepts for young children to acquire is that of "same." When are two animals or colors or utensils the same? Pantomine and visual demonstration, as well as the use of language, help to strengthen the skills of recognizing essential similari-

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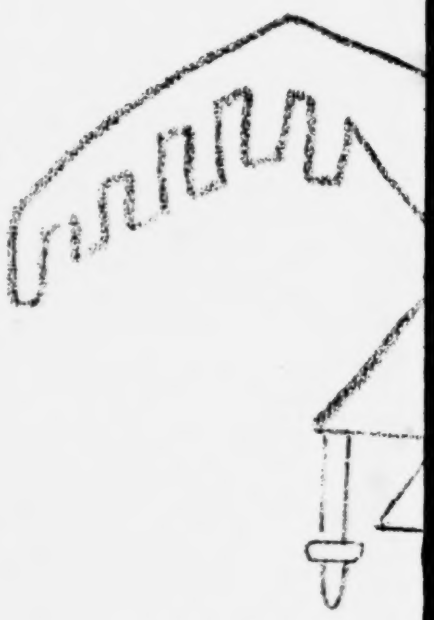

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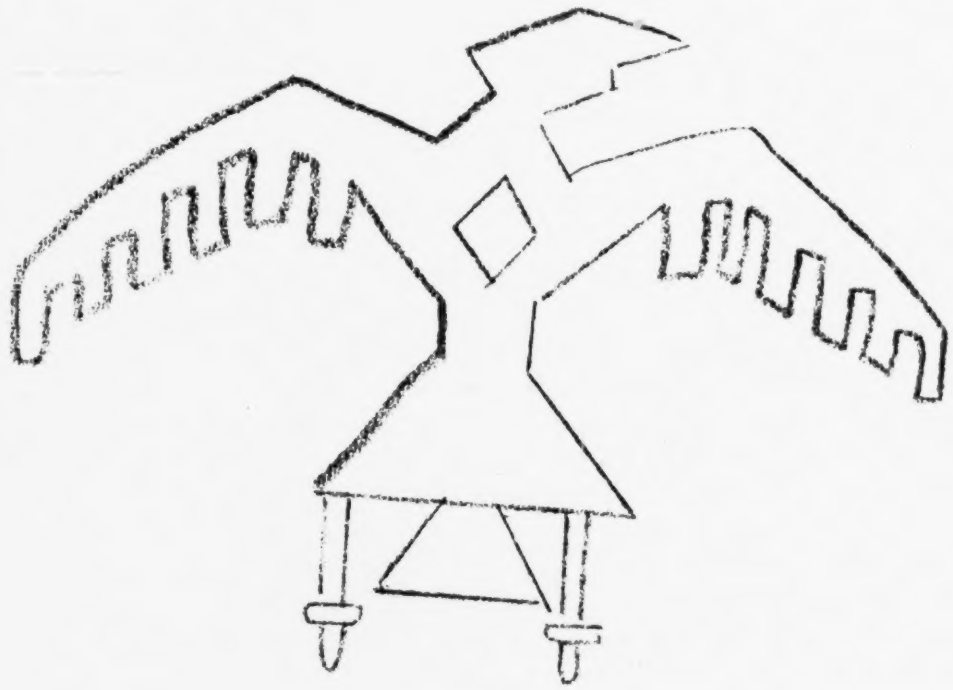
ties and ignoring irrelevant variations among objects, (for example, two dimes, one slightly rusted, are still, functionally, the same.)

The use of lotto and sorting games, often produced by the teacher and aide with culturally relevant materials, offer an important setting for the development of word meaning and problem-solving skills in young Indian children. (See Games to Make.)

by Dr. Vera P. John



SUGGESTED ACTIVITIES TO INCREASE LANGUAGE POWE

Increasing skills in English language usage and comprehension will need
classroom experience. Alghough no formal period is recommended, the opp
simple games, sing the songs, and practice the language must be planned
groups at work/play, on field trips, and during other parts of the daily
to learn and use the materials below.

Teacher-planning is most important in building a sequence of experiences
ability to produce English sounds, whether the children already use Engl
whether they are making the transition from another language. One needs
one-word activities (Phase I), labeling, naming, locating on command, an
(Phase II), using words in a phrase and producing sounds that are made b
walking, etc., to final (Phase III) in which children repeat and produce
frame or full sentence.

Phase I - Sound Game

Set out three to five sound-making objects; example: bell, drum, pan w
two blocks.
Ask children to close eyes and listen while another child chooses one
sound.
Then, everyone guesses.

Phase I - III

Get magazines, Sear;s cataloges, etc., and let children cut, or tear a
groupings - label in native language and English - furniture, cars, cl
foods, etc.

In Phase II encourage sounds made by cars, etc.

In Phase III try to get frames:

These are _____ All of these are _____ This is not a

It's a _____

Phase I and II - Pantomime guessing

Child does: hammering, weaving, climbing, riding, crawling, etc.
Teacher and children supply name for action.

UGGESTED ACTIVITIES TO INCREASE LANGUAGE POWER

h language usage and comprehension will need much practice and actual
ough no formal period is recommended, the opportunity to play these
s, and practice the language must be planned by the teacher. Small
ld trips, and during other parts of the daily program are encouraged
als below.

portant in building a sequence of experiences to develop meaning and
sounds, whether the children already use English extensively, or
transition from another language. One needs to start with simple,
I), labeling, naming, locating on command, and building to phrasing
a phrase and producing sounds that are made by animals, cars, horses,
ase III) in which children repeat and produce words in context of a

nd-making objects; example: bell, drum, pan with spoon, hammer,

s and listen while another child chooses one of these to make a

aloges, etc., and let children cut, or tear and paste object
ve language and English - furniture, cars, clothes, plants,

nds made by cars, etc.

rames:

All of these are _____ This is not a _____

guessing

eaving, climbing, riding, crawling, etc.
ly name for action.

Sound guessing

Child does things that make sounds in room: close book, clos
hands, jump, etc.
Others close eyes and guess.

Phase II - Teacher singing descriptions

Phase III - Children singing descriptions

Here's a simple melody whose words can teach structure of E
thing can be panned off as a rhythm.

I can walk and I am walking

Walk walk walking is good fun

I can walk and I am walking

Walk with me oh please do come

I can jump, run, hop, sing, lift (pretend something heavy),
whirl, etc.

Note: The following consonants or consonantal clusters incorp
no Navajo: f as in fun
ng as in sing
r as in run

Phase II - III - Horse hoof clap

Ask children how the horse hoofs sound in clapping hands.
Formalize what child has given by strengthening, accenting r
This is the way _____'s horse rides clap clappety
Slow? This is the way ------
Fast? This is the way ------

make sounds in room: close book, close door, drop object, clap

guess.

ng descriptions

ging descriptions

dy whose words can teach structure of English verb, and the whole
off as a rhythm.

walking

good fun

walking

se do come

, sing, lift (pretend something heavy), tip-toe, wiggle, glide,

sonants or consonantal clusters incorporated into the above have
f as in fun
g as in sing
r as in run

<u>oof clap</u>

orse hoofs sound in clapping hands.
as given by strengthening, accenting rhythm and then all repeat:
_____'s horse rides clap clappety clappety, etc.
ay ------
ay ------

Phase III - Lobby Loo - To teach parts of the body and also first a

I put my first hand in
I put my first hand out
* I give that hand a shake, shake, shake
And turn myself about

Oh, here we go Lobby Loo, etc.

I put my secon
I put my first
I put my secon
I put my whole
etc.

* That may be difficult - show how to make the th sound

Get a big doll or pretend one child or teacher is a doll. Where are dolly's eyes? One or two children show on dolly. Then on themselves, "Here are my eyes."

In hand and fingers, nd and erz may require attention. At first (not on same day) from singulars, i.e., eyes, ears, teeth, feet, from nose. mouth so as not to conflict verbs is and are.

Phase III

In discussing children's pictures use some old ones (two weeks ag will then be past tense. Remember when you sent, did, saw, playe child to verbalize past tense in this way.

Phase III

Four children holding signs (picture) stand in four parts of the can be store, rodeo, school, bus, hogan, etc. Each child says whe "I want to go to the _____. Then he goes. This can be done in tongue. Or, using some children as "drivers" (of bus, pick-up, ca stop and pick up the children who say, "Take me to the _____".

Example: Driver: Where are you going?
Passenger: I want to go to the _____.
Driver: O.K. Get in.

Phase III - Rodeo - Dramatic Play

Children take turns being:
* Announcers (In Navajo or English)
Riders

* Ladies and Gentlemen
You will see--

teach parts of the body and also first and second. (ordinals)

shake, shake

I put my second hand in
I put my first foot in
I put my second foot in
I put my whole self in
etc.

etc.

how how to make the th sound

one child or teacher is a doll.
One or two children show on dolly. Then all say and show
e my eyes."

nd erz may require attention. At first do plurals separate
ngulars, i.e., eyes, ears, teeth, feet, legs, etc., separate
t to conflict verbs is and are.

pictures use some old ones (two weeks ago). The discussion
Remember when you sent, did, saw, played, etc., encourage
ense in this way.

ns (picture) stand in four parts of the room (yard). Signs
ol, bus, hogan, etc. Each child says where he wants to go.
__. Then he goes. This can be done in English or mother
hildren as "drivers" (of bus, pick-up, car, horse), the drivers
dren who say, "Take me to the _____".

e are you going?
want to go to the _____.
Get in.

c Play

:

o or English) * Ladies and Gentlemen -- You will see-- ** Get your _____ Ice cold _____

Broncos
Calves
Singers or other entertainers
** Refreshment sellers

Next we have--
The prize goes to--

The degree of dialogue possible depends on ability of particular g
expect the play to become more verbal and more organized as it goe

Phase III - Sample Concept Lesson. Teaching little - big - bigger (

Two teachers: One is commentator and one is the blower. Demonstr
small balloon and begins to blow as the other describes, "It's lit
little. It's getting bigger and bigger. It's so big, etc., until
Second time children join with commenting teacher in "blow by blow
Follow-up: Find things in room - big - little. Who is bigger tha

Sunday - Domingo

Monday - Domingo Buska'ni (Day after Sunday)

Tuesday - Mali ji Na'anish (Two days work)

Wednesday - Tagu ji Nda'anish (Three days work)

Thursday - Di ji Nda'anish (Four days work)

Friday - Ashdla aji N'aanish (Five days work)

Saturday - Yiska' Domingo (Little Sunday or day before Sunda

These can be recited in phase III, one a day, holding up fingers 1 -
i.e., "Thursday is Di ji Nda'anish = Four days work" (Hold up finge

Pictures of rugs can be used to:
Evoke pride in Navajo or other Indian craft.
Enjoy beautiful patterns.
Learn colors, red, orange, brown, blue, green. (May require pract
Learn such terms as: line, square, stripe, diamond, zig-zag, cros
top, bottom, sides.
Practice counting: stripes, diamonds, etc.

See slides, too, of patterns on pottery, rugs, baskets, and other ar

Next we have--
The prize goes to--

Right here--
(How much does it cost?) It costs 15 cents, etc.

iners

ble depends on ability of particular group. One would
re verbal and more organized as it goes along.

son. Teaching little - big - bigger (final g and gr worked on)

tator and one is the blower. Demonstrate: One shows a
blow as the other describes, "It's little, it's still
and bigger. It's so big, etc., until it bursts."
th commenting teacher in "blow by blow" description.
oom - big - little. Who is bigger than -- ?

ka'ni (Day after Sunday)

anish (Two days work)

'anish (Three days work)

nish (Four days work)

N'aanish (Five days work)

ngo (Little Sunday or day before Sunday)

III, one a day, holding up fingers 1 - 5 Mon. - Fri.
anish = Four days work" (Hold up fingers)

o:
er Indian craft.

rown, blue, green. (May require practice)
square, stripe, diamond, zig-zag, cross, within, around,

, diamonds, etc.

on pottery, rugs, baskets, and other articles.

STORIES AND LANGUAGE EXPERIENCES

Many of the stories of the Indian people deal with the beginning of things: how the world was created, the sun and moon and stars, the earth and its features -- mountains, lakes, rivers, canyons, plains. True, the puzzle of how these things came to be as absorbed all the peoples of the world, from time immemorial. Children today, whether Indian or not, muse over these same questions.

As he went to bed one evening, a four year old boy revealed the preoccupations of his mind, and recalled the events of his day, by asking:

Why does hair stick to your head? Why does wood stay together? Why does the card table stand up? Why do jail bars stay together? Why does wallpaper stick? Why are eggs good for you? Why do lights turn on? Why is it sometimes hot, cold, warm? Why are cakes for birthdays? Why is a nickle 5 cents? Why do pencils have blades all through them? Why does fur stay on dogs? Why are riddles hard and easy? Why don't people have tails? Why do birds fly? Why is money treasure? Why do cowboys go after money? Why is there such a thing as people?

Some of these questions are reflections of the times and setting of one child. Some are universal in content. Stories of fact and fantasy will appeal to all young children as they build a picture of themselves and the world.

Indian legends tell of the way the animals became what they are: How the spider got its red spot, why bears are black, why the skunk smells good most of the time, how the pony was made from mud. Likewise, there are tales

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Likewise, there are tales

which deal with the fertility of the soil, the rain and the sunshine, and the growth of the crops. Animals and people talk together and share many of the same problems. There is clearly no bar to communication between them. In this way, the stories have a particular appeal to young children, to whom the distinction between being human and being an animal is not any barrier. In his imagination, the young child moves easily from one world to another. Frequently, also, he is not upset about personification of inanimate objects -- trees, flowers, clouds, and the like. As long as things move, they can be alive. In some of the stories the little and helpless character will outwit a stronger force, or solve a problem too big for the others.

For these reasons, Indian tales are particularly suited to young children. There is a direct quality about the traditional stories which takes no account of strict chronological time and sequence. It is easy for the tale teller to move about in space and time, depending on the needs of the story, and for characters to appear and disappear rather unpredictably. Children do not mind this kind of easy movement suited to the story, and are not in any sense bound by adult notions of time sequence or causality. The plot does not need to be elaborate. A clearly identified beginning and end or conclusion are likewise readily dispensed with. The relish of the tale lies in its direct dealing with a problem that needs to be solved, an explanation for phenomena that are puzzling, a solution of the whys or wherefores of existence, or -- sometimes -- a good joke on a character who has become too pompous or arrogant.

Each of the many Indian tribes has its own particular explanation for things. The Navajo have a story about Spider Woman who instructs Navajo women to weave on a loom which Spider Man told them how to make. The Pima tell how the rattlesnake, once the most beautiful but defenseless of snakes, received his fangs -- two powerful rays from the Sun God. The Eskimos account for the beginning of fish and sea animals. In addition, there are beloved tales which treat of real events sometime in the past, travels or experiences of the tribe.

Because of the universal themes which underlie much of the legend and lore of the Indian people, their stories can be used by other tribes with equal understanding and appreciation. It may be good for Indian children to begin to know something of the stories of their Indian brothers of other regions and tribes, and to appreciate the differences of living associated with woodland, plain, desert and tundra.

Stories can be read to children at many times during the day. The teacher who has a tale or two in her memory can hold children during restless periods of waiting for a bus, before lunch, or keep them resting in the shade after a long walk. Of equal importance is the need to encourage children to tell their own stories, to construct events of the day in story form, to fantasize about the future and to make up their own explanations for things. The rich oral tradition of the Indian people depends upon the imagery and skills of the story tellers of this generation.

The language of each Indian tribe has its own special flavor and meanings, much of which is lost in the translation into English struc-

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ture and vocabulary. In her anthology of Indian prose and poetry, Margot Astrov* speaks of the vivid and sensual descriptions in the original texts which include visual, auditory, even kinaesthetic qualities: the rustling of leaves, the monotonous patter of rain striking against the teepee, the booming of high winds, the rippling of a brook, the soothing coolness of shade. She cites one translator, Robert H. Lowie, who was able to preserve something of the poetry of the original work of the Crow and Hidatsa Indians:

When the day is cloudy, the thunder makes a low rumble and the rain patters against the lodge, then it's fine and nice to sleep, isn't it?

-----and again,

You hear the wind blowing, blowing, then all of a sudden it dies down just as if it had gone off to sleep.

Since so many of the tales preserved in anthologies have been stripped of much of this color and descriptive flavor, it may be possible for those who are using them to reach into their own feelings and attempt to recreate what must have been added by the original Indian storyteller as he held his audience spellbound.

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*American Indian Prose and Poetry. An Anthology, Edited by Margot Astrov. New York: Capricorn Books. 1962. Originally published as The Winged Serpent, 1946 (Page 11.)

The Teacher's objectives, through the use of written and spoken story materials, may include the aims of getting children,

- To enjoy the stories of their own heritage.
- To listen with attention of growing understanding.
- To think logically and critically (in terms of their own experience).
- To begin to appreciate other times, other lands, other people.
- To observe and recall events.
- To use words to express ideas, feelings and relationships.
- To begin to hear speech rhythms and construction models and to reproduce these in their own conversations.

A few Indian legends are included, below, to suggest the flavor and form. In many instances, the stories lend themselves to dramatization and role playing.

WHY SKUNK SMELLS PRETTY GOOD MOST OF THE TIME
A Ute Tale

The birds held a council. Mocking bird said, "That Skunk, what are we going to do about him? He is like a little boy with a bow and arrow. He shoots this way, and that way."

Crow said, "It smells too bad around here. My babies do not smell like crow babies. They smell like skunk babies."

Blue Jay said, "I have a plan. One of us must go down into the valley and tie a string around that bad smell."

The birds said, "Eagle, you can fly best. You are the one to go down into the valley, you are the one to tie a string around Skunk's bad smell."

Eagle flew down the m
Skunk. He was going
If he saw someone, he
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He flew quietly, but
Eagle smelled bad. H
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The birds said, "Canar
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Quail said, "There is
He is the night-hunter

Owl flew down. He sa
a bush. Skunk had bee
Now he was tired. Owl
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THE SPIDER
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GOOD MOST OF THE TIME
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Eagle flew down the mountain. There was Skunk. He was going around like a bad boy. If he saw someone, he would throw that bad smell on him. Porcupine smelled bad. Turtle smelled bad. Deer smelled bad. Frog smelled bad, too. Eagle flew close to Skunk. He flew quietly, but Skunk heard him. Now Eagle smelled bad. He flew back upon the mountain. He sat in a tree by himself.

The birds said, "Canary, Skunk cannot hear you. You are the one to tie up Skunk's bad smell." Canary too took the string. He flew down in the valley. He didn't make much noise. He almost did it. But Skunk heard him. Now Canary sat alone in another tree.

Quail said, "There is one who can do this. He is the night-hunter. His name is Owl."

Owl flew down. He saw Skunk sleeping under a bush. Skunk had been a bad boy all day. Now he was tired. Owl made no noise. He was quiet as a shadow. He tied the string around Skunk's bad smell.

Skunk is a good neighbor now. He smells pretty good most of the time.

THE SPIDER AND THE FIRE
Cherokee Legend

In the olden days the people had no fire. Many suffered from the cold. It was learned that in some mysterious manner an old woman with mystical power possessed fire but guarded it closely and refused to part with even one coal. She lived across the river.

A meeting was called at which many volunteered to cross the river and try to obtain the fire. First the bear tried. His coat

was burned black and he was forced to swim the river to safety. Ever since, we have had the black bear.

Next, the crows tried. They, too, were burned black and forced to return without the fire. Ever since, we have had black crows.

Then several birds in a body attempted the great feat. All were burned black and returned without success. These we call black birds. Others tried, but each returned with only a blackened coat.

At last, the spider volunteered. No one thought that he could succeed. Tying a small pot on his back, the spider spun a web across the river to serve as a bridge on his return. Then, crossing slowly and carefully, he, because of his size, eluded the guard and obtained a small coal which he put into the pot.

As he crossed the stream on his return trip, the spider felt the little pot grow hotter, but he staunchly continued on his way. Finally, he arrived safely home with his precious cargo. But when the pot was removed from the spider's back, it was discovered that he was not only burned black, but also had a bright red spot where the little pot had rested on his back. Ever since, we have had the black spider with the red spotted back.

WHY RIVERS FLOW BUT ONE WAY
Puget Sound

Long ago, before the world changed, all the animal people came together for a bit meeting. Eagle was the headman of the gathering. He lived up high, in the top of a tall tree. Whenever the people wanted to decide anything important, they called up to him as he sat in the tree, and he gave them his opinion.

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them his opinion.

Each of the animal people at the meeting had a chance to say what he thought. Even Raven and Mink, who were slaves, told the others what they believed should be done. Raven's opinion was so good that he became known as a wise man.

For a long time the people argued about the direction in which the rivers should flow. Should they flow up or down, or both up and down? All but Raven thought that one side of all rivers should run up the mountains and the other side should run down. All the rivers should go up as far as the falls, they said, and then should turn around and come back.

"What do you think of our plan?" they called up to Eagle.

"I agree with you," answered Eagle. "If the rivers go both ways, the new people who are to come will have an easy time. It will not be hard to go upstream, and it will not be hard to go downstream. What does Raven think?"

"I don't agree with you," replied Raven. "If the rivers turn round at the falls, salmon will have no chance to stop. They will go up as far as the falls, and then they will come right back again. Where will they spawn? And how will the new people catch them? I think that all rivers should flow one way."

"Raven is right," agreed Mink. "The people will have a very hard time catching salmon if the rivers run both ways."

"I think the rivers should go but one way," repeated Raven. "And I think that at all the bends in the streams there should be little eddies. They will make the salmon go slower. The people can fish there, too."

"Raven's reasons seem very good," said Eagle in the tree.

"Raven's reasons seem very good," repeated the people on the ground. So they followed his plan.

That is why all rivers now run but one way. That is why salmon go all the way up their home river to spawn.

-- from Indian Legends of the Pacific Northwest. Ella E. Clark. University of California Press. Berkeley, Calif. 1958.

AN OLD STORY
Blackfoot

One day a rabbit was bragging that he could out run everything on the flat where he lived. A turtle heard him and challenged him to a race. The rabbit just laughed, but set a date for the race.

The turtle got his friends together and told them about the race and how they could help him win. The day of the race arrived and the race course was to be over four hills. When they started the rabbit was in the lead, soon he looked up and to his surprise he saw the turtle just going over the top of the first hill, as he topped the first hill he saw the turtle going over the second hill, the rabbit turned on more speed but as he topped the second hill the turtle was disappearing over the third hill. He used his very fastest speed but when he got to the top of the third hill the turtle was going over the fourth. He was now going at his top speed when he reached the top of the fourth hill only to see the turtle crossing the finish line. He could no

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line. He could not figure this out.

This is how the turtle won the race: He got each of his four friends to get on a hill and hide in the deep grass and watch, as the turtle from the previous hill would go over the top and then hide in the grass, the turtle on the next hill would start and do the same thing each time. The rabbit did not know this was not the turtle that challenged him that he saw going over each hill.

This is a story the old men like to tell at gatherings.

---Donna Fisher

HOW THE RAVEN GOT HIS COLOR
Blackfoot

Many years ago the Blackfeet were short of food because there was no game. The Chief sent for Napi, creator of all things. After Napi arrived the Chief told him of their hardships. Napi said that he would look for the trouble the next morning.

Early the next day Napi and the Chief's son started out to see why there was no game to be found. They traveled for many days without finding a trace of game.

One day they came to a cave full of buffalo, deer and elk, but before they could drive the animals out, a woman and child came from a lodge on a hill over the cave. Napi changed himself into a dog and his companion into a stick. They followed the woman and child into the forest. The woman noticed the stick and thought it would be a good stick to dig roots, the boy asked to keep the dog and his mother said "Yes."

Later, they all went to their lodge but when they arrived there, the woman's husband said they would have to get rid of the dog and the stick as they were evil looking.

That night the dog and stick went to the cave, Napi changed them back to their original form to chase the game out of the cave. Then Napi changed himself and the boy back to the shape of a dog and a stick. The man in the lodge heard the dog barking and came to see what was happening. He was going to kill the dog and break the stick. The stick rolled up in the hair of a buffalo and escaped. The dog got away also. The dog chased the buffalo toward the village of the Blackfeet. Napi changed himself and the boy to their human forms. Then they went to the village to inform the people of the game. The men of the tribe went down to the river near the buffalo trap.

They tried to chase the buffalo into the trap, but the old man on the hill had changed himself into a big white bird, and scared the buffalo away.

The Blackfeet tried again and again to drive the buffalo into the trap but couldn't succeed. Napi caught the bird and tied it to a stick over a smudgefire and left him there, until he begged for mercy. That is supposed to be the way the raven got its color

---Donald Fisher

A CREE BUFFALO HUNT

My grandmother told me a story about the way the Crees hunted buffalo. She said that they would start getting ready the day before the hunt was to start. The men would tell the women what they wanted taken, and the women

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---Donald Fisher

EE BUFFALO HUNT

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wanted taken, and the women
would pack it. They also would take the food and utensils that would be needed. The men would sharpen their knives, clean and polish their guns, and load their powder horns.

The next morning they would get up early and eat breakfast before starting on the hunt. They would head for the plains where they generally had the best hunting. They would send scouts ahead to locate the buffalo herds, sometimes this would take many days.

My grandmother said that her father went on his first hunt when he was only sixteen. This was the story he told about his first hunt.

"Some of the scouts returned with the story that there was a herd just a few miles away. They decided to wait until all the scouts returned so they made camp. Early the next morning they started toward the herd. First they came upon two bulls fighting, as the herd had moved on they decided to watch the fight for awhile. They finally caught up with the herd and chased them for several miles killing what they needed. At last they had their limit so they started skinning and dressing them out. Then they dried the meat.

"On the return trip home they passed the bulls that were fighting but both were dead. Some said that they fought till both died; others said that someone shot them. The hunters did not investigate.

"When they reached camp they had a big feast and dance to celebrate the successful hunt."

---Daniel Boggs

COLLECTIONS OF LEGENDS AND AUTHENTIC IND

The stories collected and edited may need some adaptation for us

Blackerby, A. Tale of An Alaskan Whale. Binfords Press

Clark, Ella E. Indian Legends of the Pacific Northwest. Berkeley: California Press. 1958

Coffin, Tristram P. Indian Tales of North America. Philadelphia: Society, Ind. 961

Coleman, Sr. B., et al. Ojibwa Myths and Legends. Ross

Harris, Christie. Once Upon a Time. New York: Atheneum Pub. 196 of the North Pacific Indians.

Hayes, William D. Indian Tales of the Desert People. New York: D

Hazeltine, Alice I. (comp.) Red Man, White Man. New York: Lothr Shepard. 1957

Jacobs, J. Indian Folk and Fairy Tales. New York: Putnam

Marriott, Alice. Saynday's People: The Kiowa Indians and the Story Lincoln: University of Nebraska Press. 1963

Marriott, Alice and Carol K. Rachlin. American Indian Mythology. Crowell. 1968

Martin, F. Nine Tales of Raven. Harper

Pine, T.S. and J. Levine. The Eskimos Knew. McGraw

Phillips, S. W. Indian Campfire Tales. New York: Platt and Munk.

Reichard, Gladys A. Spider Woman. New York: Macmillan. 1934

Rushmore, Helen. The Dancing Horses of Acoma. World Publ. 1963

Shaw, A. M. Pima Indian Legends. Tucson: University of Arizona P

COLLECTIONS OF LEGENDS AND AUTHENTIC INDIAN TALES

and edited may need some adaptation for use with young children.

n Alaskan Whale. Binfords Press

egends of the Pacific Northwest. Berkeley: University of
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ian Tales of North America. Philadelphia: American Folklore

Ojibwa Myths and Legends. Ross

pon a Time. New York: Atheneum Pub. 1963 Five old tales
dians.

Tales of the Desert People. New York: David McKay. 1957

p.) Red Man, White Man. New York: Lothrop, Lee and

nd Fairy Tales. New York: Putnam

s People: The Kiowa Indians and the Story They Tell.
Nebraska Press. 1963

K. Rachlin. American Indian Mythology. New York:

Raven. Harper

The Eskimos Knew. McGraw

ampfire Tales. New York: Platt and Munk. 1963

er Woman. New York: Macmillan. 1934

cing Horses of Acoma. World Publ. 1963

Legends. Tucson: University of Arizona Press. 1968

STORIES ABOUT INDIAN CHILDREN AND THEIR LIVES

*Suitable for use with children ages six and younger

*Books About American Indians. Sonie Bleeker. New York: Morrow

Apache Indians
Aztec
Cherokee
Chippewa Indians
Crow Indians
Delaware Indians
Eskimo
Horsemen of the Plains: The Nez Perce Indians
Horsemen of the Western Plateaus
Indians of the Longhouse
Mission Indians of California
Navajo
Pueblo Indians
Sea Hunters
Seminole Indians
Sioux Indians

*Cherokee Animal Tales. Robert Frankenberg. Holiday. 1968

*Cliff Dwellers of Walnut Canyon. Carroll L. Fenton. Day. 1960

*Desert People. Ann Nolan Clark. Viking. 1962

In My Mother's House. Ann Nolan Clark. Viking. 1943

*Indian and His Pueblo. Louise and Richard Floethe. New York: Scribners. 1960

*Indian Children of America. Margaret C. Farquhar. New York: Holt

Indian Sign Language. Robert Hofsinde. New York: Wm. Morrow. 1956

*Indian Two Feet and His Eagle Feather. M. Friskey. Childrens.

*Indian Two Feet and His Horse. M. Friskey. Childrens.

Indians of the America's Series. Melmont

American Indian as Farmer
Apaches
Cherokees
Children of the Seed Gatherers
Dakotas
Day in Oraibi
Day with Honau
Day with Poli
Delawares
Dog Team for Ongluk
Hopi Indian Butterfly Dance
Iroqouis
Little Indian Basket Maker
Little Indian Pottery Maker
Moolack: Young Salmon Fisherman
Navajo Land: Yesterday and Today
Nika Illahee
Seminoles
Something for the Medicine Man
Tohi: A Chumash Indian Boy

*Little Elk Hunts Buffalo. Jessie B. McGraw. New York: Nelson. 1961

Little Navajo Bluebird. Ann Nolan Clark. Viking.

*Little Sioux Girl. Lois Lenski. Philadelphia: Lippincott. 1958

*The North American Indians. Ernest Berke. New York: Doubleday. 1963

Ootook, Young Eskimo Girl. L. Harrington. Hale

Panuck. The Eskimo Sled Dog. Frederick Machetanz. New York: Scribners. 1939

*Picture-Skin Story. Alex W. Bender III. New York: Holiday House. 1957

*True Book of Little Eskimos. D. A. Copeland

*True Book of Indians. T. Martini. Childrens

CHILDREN'S BOOKS OF GENERAL INTEREST WHICH HAVE SPECIAL VALUE FOR INDIAN CHILDREN

A Pocket Full of Crickets. Rebecca Caudill. Holt. 1964

A Snowy Day. Ezra Jack Keats. Viking. 1962

All About Animals and Their Young. R. M. McClung. Random House

All Kinds of Seals. B. Kohn. Random

Animal Folk Tales of America. T. Palazzo. Doubleday

Animal Mothers and Babies. R. Foran. Warne

Animals of the Artic. G. Vevers. McGraw

Animal Stories to Read Aloud. Wonder. 1959

Animals at Home Series. M. Koenig. Grossett and Dunlop
Beaver - Bee - Mouse - Penquin - Stork - Whale

Animals Round the Year. G. O. Blough. Harper-Row

Animal Tracks and Hunter Signs. E. T. Seton. Doubleday

Brighty of the Grand Canyon. M. Henry. Rand

The First Snowflake. M. A. and E. W. Gibson. Allied Florida

The Fox Went Out On a Chilly Night. Peter Spier. Doubleday. 1961

Here Come the Whales. A. E. Goudey. Scribner
Also: Here Come the Beavers, Deer, Dolphins, Raccoons

Hide and Seek Frog. A. R. Tresselt. Lothrop

The Mighty Bears. R. M. McClung. Random

Mighty Hunter. B. and E. Hader. Macmillan

Oley the Sea Monster. M. H. Ets. Viking

Red Fox and His Canoe. N. Benchley. Harper and Row

Red Mittens. L. Bannon. Houghton Mifflin

Reindeer Trail. B. and E. Hader. Macmillan

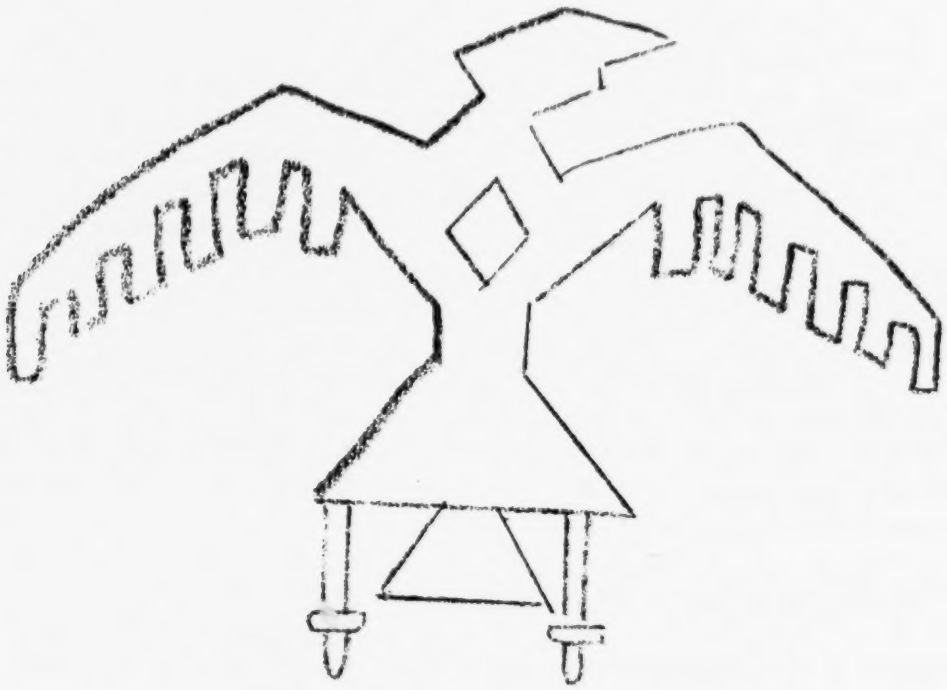
Remarkable Chameleon. Lilo Hess. Scribners. 1968

Time for Wonder. M. F. Taylor. United Church

Tracks and Trailcraft. E. Yaeger. Macmillan

Tracks in the Snow. R. Todd. Dover

Whales Go By. F. Phleger. Beginner Press



A SELECTED LIST OF RECOMMENDED BOOKS FOR CHILDREN, AGES 3-5 WHO MAY HAVE HAD LITTLE PREVIOUS OPPORTUNITY TO SEE AND ENJOY BOOKS

Compiled by Dorothy J. Anderson
Children's Services Division
American Library Association

ABC, written and illustrated by Bruno Munari. World, 1960. $3.50
This is a clearly drawn ABC book with whimsical touches by the artist.

Bedtime For Frances, by Russell Hoban; illustrated by Garth Williams. Harper, 1960. $2.75.
Frances, the badger, could be a child -- the way she thinks up reasons for not going to sleep. Like a child, she's not pleased with the thought of a spanking and so does go to sleep after many interruptions.

The Biggest Bear, by Lynd Ward. Houghton Mifflin, 1953. $3.25.
Johnny solves the problem of a bear cub that becomes bigger and bigger.

Blueberries for Sal, by Robert McCloskey. Viking, 1948. $3.00.
Little Sal and her mother and Little Bear and his mother get all mixed up when they set out to pick blueberries.

The Camel Who Took a Walk, by Jack Tworkov. Dutton, 1951. $2.95
A beautiful camel unwittingly outsmarts a tiger, a monkey, and other forest creatures who lie in wait for her. Pleasant, lilting language and a surprise ending.

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and a surprise ending.

Caps for Sale, written and illustrated by Esphyr Slobodkina. W. R. Scott, 1947. $2.75
While a tired peddler slept, a group of mischievous monkeys took all of the caps from his pack. The peddler's efforts to get the caps returned amuse children and make this a good story to act out.

The Circus Baby, written and illustrated by Maud and Miska Petersham. Macmillan, 1950. $3.00
A circus elephant spends a great deal of time watching the clown family. One day she decides her baby elephant must learn to eat properly--with high chair, bib, dishes, and silver. The result is disastrous. The pictures will please small children who may remember having had some of the same difficulties.

The Country Bunny and The Little Gold Shoes, by Du Bose Heyward; illustrated by Marjorie Flack. Houghton. $3.25.
Delightful pictures in the delicate soft colors of Spring show how the Country Bunny was chosen to be one of the Easter Bunnies.

Crow Boy, by Taro Yashima. Viking, 1955. $2.75.
Pictures in rich colors illustrate a story about a wise teacher and a lonely boy.

Curious George, written and illustrated by Hans A. Fey. Houghton, 1941. $3.25.
Curiosity brings about the capture of George, a little jungle monkey, and later brings him some exciting adventures on his boat ride to America and on his arrival in New York City when he gets loose.

The Day We Saw the Sun Come Up, by Alice Goudey; illustrated by Adrienne Adams. Scribner. $3.25.
Two children watch day come and go. Simple explanations of sun and earth. Delicate pastel drawings.

The Five Chinese Brothers, by Claire H. Bishop; illustrated by Kurt Wiese. Coward-McCann, 1938. $2.50.
Amusing folk tale of five unusual Chinese brothers is told in brief text and bold pictures. The humor and pattern of the story make it ideal for storytelling or lap reading.

Grandfather and I, by Helen E. Buckley. Lothrop, 1959. $2.95.
A boy's delight in walking with his grandfather. Lilting, repetition.

The Happy Lion, by Louise Fatio; illustrated by Roger Duvoisin. Whittlesey (Now McGraw-Hill), 1954. $2.75.
The Happy Lion lived in a zoo in France. All the people who visited the zoo were his friends until he got out of the cage and tried to return their visits. Rollicking nonsense with distinguished pictures. More adventures follow in later books.

Harry The Dirty Dog, by Gene Zion. Harper, 1956. $3.25.
Harry hates to be clean and hides the brush the children use to bathe him.

Horton Hatches the Egg, by Dr. Seuss. Random 1940. $2.95.
Story in verse of Horton who hatches the egg of Mayzie, a very lazy bird.

In A Pumpkin Shell:
illustrated by Jo
court, 1960. $2.
Mother Goose rhym
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An inchworm saves
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In A Pumpkin Shell: A Mother Goose ABC, illustrated by Joan Walsh Anglund. Harcourt, 1960. $2.95.
Mother Goose rhymes have been carefully chosen for each letter of the alphabet.

Inch by Inch, written and illustrated by Leo Lionni. Obolensky, 1960. $3.50.
An inchworm saves himself from a hungry robin by proving his usefulness as a measurer. Beautifully colored imaginative pictures.

Katy No-Pocket, by Emmy Payne; illustrated by H. A. Rey. Houghton. $3.00.
Katy Kangaroo didn't have a pocket in which to cart her son Freddy so she asked other animals how they carried their babies.

The Little House, written by and illustrated by Virginia Lee Burton. Houghton, 1942. $3.00.
Panoramic pictures full of detail trace the changing seasons and the changing scene as the city moves in around the little house. Its move back to the country completes a satisfying experience.

Little Toot, written and illustrated by Hardie Gramatky. Putnam, 1939. $3.50.
The gay story of a lighthearted tugboat that finally assumed his responsibility. The original drawings by the author are most appealing.

Make Way for Ducklings, written and illustrated by Robert McCloskey. Viking, 1941. $3.50.
The popular and amusing story of the trip taken by Mrs. Mallard and her ducklings when they move from their home on an island in the Charles River to a new loca-

tion in the Boston Public Gardens, snarling traffic as they travel along the busy, narrow streets. A Caldecott Medal Award.

Mike Mulligan and His Steam Shovel, by Virginia Burton. Houghton, 1939. $3.25.
Mike Mulligan remains faithful to his steam shovel, Mary Anne, against the threat of the new gas and Diesel engines.

Millions of Cats, written and illustrated by Wanda Gag. Coward-McCann, 1928. $2.50.
When the very old man goes out to look for a kitten, he comes home with millions and billions and trillions of cats. He and the very old woman can't decide which one to keep, but the cats settle that problem in their own way.

Mother Goose: Seventy-Seven Verses With Pictures by Tasha Tudor. Walck, 1944. $3.25.
Lovely delicate pictures in pastel shades illustrate a Mother Goose with an unusual format. Especially appealing to little girls.

Pelle's New Suit, written and illustrated by Elsa Beskow. Harper, 1929. $2.50.
Pelle, a Swedish farm boy, earns his new suit and follows each step in the process of its making. The book is memorable for its fresh, colorful pictures of rural Sweden.

Play With Me, written and illustrated by Marie Hall Ets. Viking, 1955. $2.75.
Appealing drawings illustrate the story of a little girl looking for and finding a playmate among the meadow creatures when she learns to sit quietly.

Policeman Small, wri
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The Red Carpet, by
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The Story About Pin
lustrated by Kurt
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The story of a Ch
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The Story of Babar,
by Jean de Brunh
French by Merle
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Shovel, by Virgin-
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Policeman Small, written and illustrated by Lois Lenski. Walck, 1962. $2.25.
Everyday experiences of a policeman on traffic detail are told in simple text, with picture opposite.

Rain Drop Splash, by Alvin Tresselt; illustrated by Leonard Weisgard. Lothrop, 1946. $2.75
The cadence of falling rain is caught in the brief text telling what happened on a rainy day. The raindrops "dripped from the shiny leaves, dropped from a rabbit's nose, splashed from a brown bear's tail." Full-page pictures in muted colors complemen the text.

The Red Carpet, by Rex Parkin. Macmillan, 1948. $3.75.
Rollicking verse follows the red carpet through town on a mad and fun-filled chase.

The Snowy Day, written and illustrated by Ezra Jack Keats. Viking, 1962. $3.00.
Footprints in the snow mark small Peter's travels during a wonderful fun-filled day outdoors. A Caldecott Medal Award.

The Story About Ping, by Marjorie Flack; illustrated by Kurt Wiese. Viking, 1933. $1.75.
The story of a Chinese duck who lives on a houseboat. To escape being spanked for coming up the gangplank last, he hides out one evening. After he nearly ends up in a cooking pot, Ping decides that home, even with a spanking, is highly desirable.

The Story of Babar, written and illustrated by Jean de Brunhoff; translated from the French by Merle S. Haas. Random, 1933. $1.95.
Babar is a young elephant who left the jun-

gle to live in Paris. When he goes back to his home, he is proclaimed king of the elephants. There is a tongue-in-cheek matter-of-factness which appeals to children. The childlike, yet sophisticated, pictures are good for hours of looking.

The Tale of Peter Rabbit, written and illustrated by Beatrix Potter. Warne, 1903. $1.25.
The immortal story of Peter Rabbit and his misadventures in Mr. McGregor's garden is still a favorite book for little children. They can soon "read" it just looking at the pictures.

Where the Wild Things Are, Maurice Sendak. Harper, 1964. $3.50.
Max, sent to bed for acting wildly, becomes monarch of a fantastic animal world.

White Snow, Bright Snow, by Alvin Tresselt; illustrated by Roger Duvoisin. Lothrop, $2.95.
The first snowfall brings work for the farmer, postman and policeman, but wonder and delight for the boys and girls.

The above titles and book notes were selected from the following sources:

<u>Let's Read Together</u> - American Library Association
"Caldecott Medal Books" - American Library Assn.
Picture Books - Philadelphia Free Library

<u>Books for Adults on Children's Reading</u>

<u>Bequest of Wings</u>
Annis Duff (Viking)
<u>Books, Children and Men</u>
Paul Hazard (HOrn Book)

<u>Unreluctant Ye</u>
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American Libra
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Unreluctant Years
Lilian Smith (ALA)

Following is a list of publishers of the above books:

American Library Association, 50 East Huron Street, Chicago, Illinois 60611.

Coward-McCann, Inc., 200 Madison Ave., New York, New York.

E. P. Dutton & Co., Inc., 300 Park Ave. South, New York, New York.

Harcourt, Brace & World, Inc., 7555 Caldwell Avenue, Chicago, Illinois.

Harper & Row, 49 East 33 Street, New York, New York.

Horn Book, Inc., 585 Boylston Street, Boston, Massachusetts.

Houghton Mifflin Company, 2 Park Street, Boston, Massachusetts.

Lothrop, Lee & Shepard Co., Inc., 419 Fourth Avenue, New York, New York.

Encroachment on our environment is destroying our natural resources. Neglect of the cultures of the American Indian is destroying his heritages, and his tribal patterns. In non-Indian schools, children frequently study "the Indians." For the child growing up in the context of the reservation, it becomes the task of the school to help him develop options for his future life. He must be helped to develop a healthy self-concept that respects, admires and carries forth his culture. Parents and grandparents help shape the child's view of himself and of the world around him. They further his sense of belonging to a family, group, tribe or community.

There must be channels of communication between the home and school, with the family welcome in the school environment. Before arriving at school, the Indian child has come to know his community through active exploration. He should be offered the same chance to explore the school community. School helps the child enter the world of work. It provides tasks for him, aiding him in their performance, and generally helping him to see his role in the classroom. By expanding the confines of the classroom jobs, to school jobs, and then to the roles played in the community, the child begins to value the work performed by others. Excursions and trips into the community to watch people at work expand the boundaries of the classroom, while invitations to the community members to enter the classroom and perhaps to share their skills, makes the school part of the larger community and the community part of the school.

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DISCOVERY OF SELF IN RELATION TO FAMILY, SCHOOL AND COMMUNITY

The social living program for Indian children grows out of the various aspects of his home, his neighborhood, and the school life of the two worlds in which he lives. Basic concepts are also drawn from the various disciplines in the sciences and they are translated to fit the kindergarten child's level of ability to understand.

Together these form the specific goals of the social studies program. Through the many experiences arranged by the kindergarten staff a child learns:

How to make decisions (Sociology)
Ways of getting along with others (Psychology)
To share and use available materials of the classroom (Economics)
The culture and history of his tribe.

In discovery of self the kindergarten staff can help him to:

Realize that he holds an important place in his home and his school group, make him aware that he is important.

Realize that he has a contribution to make to his family and to his classmates.

Become aware that his behavior affects the atmosphere of the classroom and the behavior of the others.

Experiences through which realization can come could be to:

Make it possible for the child to have meaningful tasks to perform in the school setting-preparing food, setting the table, preparing classroom materials, helping to clean up.

Help the child appreciate the importance of his presence as a member of the group; of the way he carries out his responsibility (call the child by name), let him complete selected tasks in his own way at his own pace; display his work in prominent places.

Reinforce positive behavior through talking with him and including him in activities; communicating with him through gesture, a pat, a smile.

Accept the child and accept his contributions.

Give the child opportunities to have full access to materials and equipment in the classroom so that he may choose activities according to his own interests and have experiences with other children in leading and following in the play activities: housekeeping area, blocks, carpentry, library and language area, dramatic play, etc.

To help the child see himself in relation to home and school the kindergarten staff can:

Arrange for short trips for small groups of children through and around the school, visiting the kitchen, the boiler plant, the nurse's office, the principal's office, and other classrooms; observing use of the typewriter, the intercom system, filing cabinets, the adding machine, the telephone, the heating equipment, the scale for weighing, etc.

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and around the school,
chen, the boiler plant, the
the principal's office, and
; observing use of the
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Other prearranged trips could include those to the children's homes, to places where parents work, the trading post, filling station, laundry, supermarket, post office. A trip to the health station or other supportive services near the school, if made after clinic hours, gives the children a chance to explore and talk with the personnel.

In planning trips to visit ruins and gather artifacts for classroom, teachers should be alert to cultural taboos.

Keeping up relationships through visits and shared experiences with Headstart, can provide for a continuum in relationships and growth - Headstart through first grade.

The kindergarten staff can give the child opportunities to reconstruct experiences and clarify his thinking through activities in housekeeping area, blocks (mapping), carpentry, library and language area, creative arts and music.

Replicate celebrations in which children and their families are involved according to local custom and character.

THE WORLD OF WORK

In looking at the world of work, the teacher may have as her objectives to help the child:

Understand that there are many kinds of jobs.
Understand that different jobs require different skills.
Understand that people often help one another through their jobs, thus contributing to the community.
Bring into focus his experiences with members of the community.

Observe and understand the roles played by others.
Find suitable models of identification.
Value the world of work.
Value jobs performed by others.

Many facets of work can be looked at. Both Indian and non-Indians should be studied. The fireman, policeman, sheriff, teacher, doctor, nurse, garbage man, religious leader, teacher's aide, social worker, plumber, service station man, cooks, mechanic, factory worker, grocer, artist, medicine man, are helpers that exist in one form or another in most communities; they may be Indian or Anglo. Today the American Indian is employed at a large variety of jobs. The following are just a few of the many occupations existing, and an example of the tribe known for it.

Farmers: Cherokees (North Carolina), Blackfeet (Montana), Sioux (North Dakota).

Herders: Navajo (Arizona), Hopi (Arizona)

Forestry: Cherokee (North Carolina), Seminole (Florida), Utes (Utah).

Sawmill: Navajo (New Mexico), Chippewa (Great Lakes).

Reindeer herding: Togisk Eskimos

Ranching: Apache (Arizona), Blackfeet (Montana).

Fishermen: Haidas (Alaska)

Construction: Mohawk

Fire Fighters: Zuni, Hope (Arizona), Mescalero Apache (Arizona).

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Zuni, Hope (Arizona),
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Oil drilling: Osage and Oklahoma Indians

Road construction: Eskimos

Manufacturing: Sioux (North & South Dakota), Canning pickles - Isleta Pueblo.

Carpenters: Cherokee (North Carolina), Sioux (North Dakota), Hopi (Arizona).

The field of work relevant to the young Indian child should relate to occupations existing for members of his tribe. No matter what occupation an Indian chooses, the options provide him the opportunity to enter the world of work, bringing his own cultural values to it. At the same time, he is permitted the right to return to his life in the tribal culture and his place in the society of the tribe, bringing with him the profits he has made in the world of work.

When one looks specifically at Indian occupations, it is necessary to include the role performed by the craftsman. Generally, we are familiar with the crafts of the Navajo and the Pueblo people. This is a brief description of a few of these crafts:

The Navajo <u>silversmith's</u> craft is about 100 years old; jewelry was originally made from cast silver (coins), melted into molds, and then filed down; today coins have been replaced by silver slugs and designs are stamped on with dies; turquoise, obtained from the Zuni, is set into the silver; while jewelry was originally made for personal use, it is now purchased by tourists.

The drum plays an important role in Pueblo ceremonial and dance because it sets the time or rhythm for the Indian. The <u>drum-maker</u> pro-

duces three kinds of drums: (1) a hand drum, consisting of a skin head and drum body of soft wood; (2) a water drum, consisting of a log with a hollow end, filled with water, and a skin over the top; and (3) a hollow drum consisting of a drum body covered with stretched hide on both top and bottom.

The craft of the Hopi potter involves the woman; she rolls a ball of clay till it forms long chains which are then wrapped or coiled around, and pressed together into the desired shape; when this is achieved, the pot is smoothed out, decorated, fired; no two pots have the same design.

Navajo women weave rugs sold to tourists; in other tribes, both men and women weave (Hopi) a rug frame consists of four poles, two vertical and two horizontal, at top and bottom; threads going up and down form the warp while the weft (woof) is the filling across; these rugs take a great deal of time to produce.

Sandpainting is part of the Navajo ceremonial to cure the ill by removing his bad thoughts; the shaman (or sandpainter) working on the floor of the hogan, draws a figure, sprinkling it with grains of sand; each part of the figure has a specified meaning; when the drawing is complete, the ill person sits in the middle of it, as grains of sand from the figure drawing are placed on his body; he then leaves the hogan as the sand is carefully scraped up, placed into a blanket, and buried. Thus the ill person is to be cured. Now sand paintings are made to be sold.

Apache women make three kinds of baskets: (1) the burden basket is made of squaw brush or split willow; portions of which are dyed black for decoration; (2) the "tus" or water basket, with its narrow neck and wide mouth;

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three kinds of <u>baskets</u>: ket is made of squaw brush ortions of which are dyed on; (2) the "tus" or water arrow neck and wide mouth; it is waterproofed by applying pitch to its surface; horsehair handles are sometimes added; and (3) the bowl-shaped basket which is coiled and wide.

The tribal society, like most societies, has engendered in it differentiated tasks and positions. There is the political leader, whether by inheritance, achievement or popularity, who is the chief. There are carpenters or masons whose job it is to help build dwellings, in return they receive the produce of the farmer or the herder. Clothing is frequently made by a person in the tribe. The health and religious needs of the Indian are met by the medicine man. The microcosm of a tribal society with its own idiosyncratic patterns must be given consideration, even though these roles are duplicated in the larger society. In some instances, both the medicine man and the pediatrician are consulted, for example.

HOUSING

The young child needs experiences which help him to make sense of his world, and to locate himself in it. Mapping is a useful technique for achieving these goals. Perhaps one starts by mapping the classroom, with the children. "This is our library near the windows; we keep our dolls over here; the science materials are also near the windows." The child thus learns to map his world through his senses. Ask a child who has been blindfolded to find his way about the room. What clues does he use? What does he see when he takes the blindfold off?

The child should become as familiar with the school room as he is with home, for the school becomes his home for a number of hours each day. Can we show the relationship be-

tween school and home? Can we carry over from his home to the classroom? Indeed, it should be done. By looking at housing, such as his own home, and the homes of other tribal people, the Indian child develops a sense of being part of something larger than his own immediate setting. An approach to housing should move from the familiar, to the less known, looking at points of similarity and differences, and high lighting conditions contributing to housing types. While this may look like a very didactic approach to working with young children, it is not meant to be so. These experiences should not take the form of a formal lesson, or presentation of facts, but should emerge from the classroom activities. Questions about what should be in the housekeeping area or what the child has in his home, give the teacher much information about the child's home, and brings the home environment into the confines of the classroom. Block building and other construction lead to further understanding of homes, building types, and the child's world.

The teacher may wish to emphasize the point that people live in different types of houses. Her goals may include:

- To develop knowledge and understanding of areas in the classroom and the home.
- To see how housing is constructed, what materials are used.
- To compare different types of housing.
- To appreciate different types of housing and the conditions of their style (i.e. tropics-chickee)
- To understand contemporary and historical housing used by different Indian tribes.

The following is a description of several types of Indian dwellings; this should not

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be construed as an exhaustive listing. It is suggested merely as a resource, to open some paths of exploration for teachers of young American Indian children. Ask yourself about colors, shapes and size of housing. Ask how the adobe is made (Pueblo), or the trees cut, and notched in housing construction. Look at the variety of roofs. Think about climate and physical conditions and how these dictated what kind of housing was built. Lastly, ask if there are ways of providing classroom experiences about housing related to the tribal culture of the children.

Indian housing varies in size, shape, construction and materials. Sioux lived in large tents called teepees. The woman erected the structure by sticking long poles into the ground, a specified distance from one another, forming a circle, and leaning the tops together. The poles were covered with hides, stitched together, and stretched over the poles. The hides were decorated by men, and included stars and animals. The teepee, or tipi, always faced the east. The housing of the Plains Indian was practical because it could be taken down and moved elsewhere as the Indian followed the game.

The Navajo home is called a hogan. It is built of logs, covered with clay or mud, and has six or eight sides, a rounded roof, with a hole in the top from which smoke could escape. The north side of the hogan belongs to the women while the south side is her husband's. Hogans always face the east because no shadow is to fall between the Navajo and the Sun when he says his morning prayers. Contemporary hogans have stoves, often oil cans, with stovepipes carrying the smoke up to the hole in the roof.

The Indians of the Pueblo lived in large compact villages, joined together, with each room built next to another. Adobe was used as the chief construction material. The thick walls of the pueblo made this home cool in the summer and warm in the winter. The roofs were supported by wooden beams covered with adobe plaster; the beams stuck out through the walls of the room; windows were small, thus cutting down on the ventilation. Rooms on the lower floors did not have entrances, and might have been used for storage. The buildings could only be reached with the aid of a ladder which made them more secure from outsiders. Modern Pueblo people live in less compact villages. While some of the new houses are built of adobe, others are made of wood. The roofs are gabled, and covered with tin. These new houses are more scattered than the older pueblos.

The Zuni tribe live in modern houses built out of stone with brightly painted doors and windows. The rooms are large with high ceilings and corner fireplaces; most Zuni homes have stoves, and small flower gardens outside of their homes; this is not usual for most Indian homes. The vegetable garden, tended by the woman, is known as a waffle garden, because of the low walls to retain water, and is planted near the river.

The wickiup, or Apache home, was also built by women. It was round or oval in shape, twelve feet across, and about eight-feet high. In the middle was a hole dug for a fire, which was used in poor weather unconducive to outdoor cooking. The wickiup frame consisted of poles set into the ground, and bent together at the top, leaving an opening for smoke to escape. Brush or branches were woven through the poles. The frame was then covered with grass, or straw. Originally, hide was placed over the structure, placed with canvas. moved easily. The w doors, and small ent may be built close t

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over the structure, but later, it was replaced with canvas. The wickiup could be moved easily. The wickiup of today may have doors, and small entrance halls. Several may be built close together.

The chickee was the home of the Seminoles; these open houses provided shelter from the sun and rain, yet allowed the breezes to pass through; the roofs were supported by poles and covered with thatch and reeds. This kind of construction was adequate for the tropical conditions of the Seminoles. Modern chickees have sides, and some have indoor toilets.

Choctaws of Mississippi made homes of wood, rectangular in shape, with curved roofs covered with thatch or bark. These houses are referred to as log houses.

The wigwam, or home of many nomadic hunters, was oval or conical in shape, built of saplings, covered with birchbark strips, and erected by a woman. Again, this was a practical type of housing because it was easily moveable.

The long house was typical of the coastal tribes of the northwest. Planks of cedar were tied together making a gabled lodge. These homes were sometimes huge, with the size proclaiming the status or prestige of its owner. Below the rafters of each house were supply shelves containing smoked and dried meats, berries and fish oils.

The Alaskan lived in igloos made of wood; while they constructed ice windbreakers when caught in a storm, they never lived in snow buildings. The traditional igloo consisted of a driftwood, or whalebone frame, and was insulated with blocks of sod. Modern Eskimo dwellings are made of wood, logs, driftwood

or other salvage and bricks.

The primitive Aleuts lived in large communal dwellings sunk deep into the ground and covered with layers of sod for insulation; these homes were entered from a hole in the roof. The barabara, or later Aleut house was smaller, and no longer a communal dwelling. It was partially sunk into the ground and was entered from the side.

TRANSPORTATION

In exploring the transportation of a tribe, one must ask where and for what reasons did this tribe choose a particular form of transportation. An agricultural people, who produce the foods needed for survival, may have had a limited need for transportation. Therefore the pace of this culture may be slower. To a nomadic tribe, moving in pursuit of food, speed and mobility might be of utmost importance. Children of these backgrounds will show a variance in their responses to the technological culture that has invaded his land.

The old "Blackfeet" tale, which has come to be known as "The Hare and the Tortoise," suggests that to the Blackfeet speed was not the most important factor for success. Teachers of these children should be aware that there may be less play with toy buses and cars, if the child spends two hours a day traveling to and from school. The child's desire to soar through the sky like a bird may be a more vivid way of thinking about transportation, than the school bus, and would not be unlike the dreams of some of his ancestors.

For the child in the classroom, transportation begins with a problem: "I want to take the cage with the horny toad outside when I

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go onto the playground." This problem could be solved by the teacher; she simply has to lift the heavy aquarium and carry it out for the child, but this would deny the child an opportunity to deal with a problem-solving situation. "How can I get this cage outside?" presents the topic of transportation in a real, concrete context.

By enlisting the aid of another child, an attempt could be made to carry the cage. The child looks about him, perhaps seeking to find a solution in his environment. A wheel barrow and wagon come into the child's visual field. It is decided that the wheel barrow is more appropriate to the situation. Thus with one child pushing, and the other balancing the horny toad's cage, the animal is moved out of the room.

The teacher, from this small flow of behavior, was able to approach the problem of transporation in a way that was meaningful for the child and grew out of his experiences. The principles of balance, how the horny toad moves, and other ways of solving problems were also part of this experience.

Children bring to the classroom an interest in various modes of transporation. Perhaps this grows out of their daily observation of vehicles. Because the child wants to know about certain vehicles, and plays with them, transportation is a meaningful area of exploration for the young child. Children play with trucks, buses, cars, boats, airplanes, and wheels, creating these materials when they are available in the classroom. Their dramatizations reflect this interest. They load and unload pick-up trucks; they make the sounds of cars and trains. At times, the child may whinny like a horse as he gallops across the prairie. Modern and

traditional boats should also be available for dramatic play. The school bus, car truck, power boat and airplane should exist along side the wagon, horse, and traditional travois. Modes of transportation typical to the Indian and his ancestors should not be neglected for they form a like between the child and his past.

The horse, introduced to the New World by Spaniards, has been important to many Indian tribes (Crow of Montana, Sac and Fox of Iowa. Navajo of the Southwest, and Plains Indians). Before the Plains Indians had the horse, they hunted on foot, following the movement of the buffalo With the use of the horse these tribes were able to cover a wider geographic territory in search of food. The skilled Navajo horsemen found that this animal's surefootedness enabled him to climb steep canyons, and thus the horse was used to get to otherwise less accessible places. The horse also helped the Plains Indians by hauling their possessions. The travois, or hauling rig, an A-shaped rack, with poles that attached to the horse, helped the nomadic Indians in their movements. The Indian did not use the wheel; he used the travois.

Several tribes, with access to waterways, developed different kinds of boats. Construction was dependent upon available natural resources, and the boat's utility. Choctaws, using boats on the rivers and creeks, probably built a boat of the dug-out variety, made by hollowing out logs. The Indians of the Atlantic and inland waterways used canoes with birch and hide the most common frame coverings. The Chippewa of the Great Lakes were especially known for their graceful canoes. The Sac and Fox tribes used boats to haul their furs which they traded. Plank boats, canvas canoes, kyaks, and uniaks were

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used by Alaskan Indians as they traveled rivers and the sea in search of fish, seals, and walrus. Eskimos also used dogsleds to pull them over the frozen ice and land.

FOOD AND COOKING

Tribal eating habits and cooking methods were determined by the availability of natural resources and by religious dictates of the group. The Apaches would not eat fish, flesh of bears or beaver. Onondagas would not use salt. The Indian fishermen of the Northeast would carefully rearrange the bones of the eaten salmon, believing that this would enable the fish to return to life to be caught again.

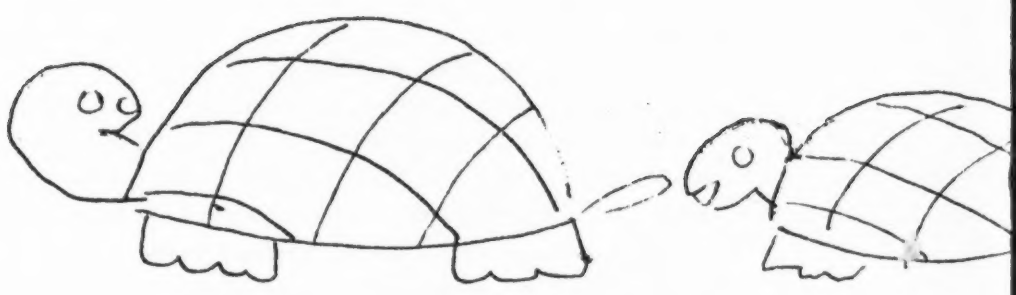
Tribal food patterns can be divided into five geographical areas, with foods specific to it. Today these areas are known for many of the foods the Indians first used. Eastern Indians (Narragansetts, Penobscots, Powhatans) cultivated beans, making the forerunner of Boston Baked Beans, and using shellfish for clambakes; they also grew pumpkins, squash, and used maple syrup; their food was frequently steamed in earthen pots, which is now called "fireless cooking". Southern Indians (Cherokees and others) made fragrant stews, soups, and baked a variety of corn breads. Plains Indians (Sioux, Cheyenne) hunted, following the buffalo and other game; they prepared their meats by roasting them over campfires. Northwest Indians (Tlingit, Kwakiutl, Salish) fished for salmon, and trapped seafood, which they steamed or broiled. Southwest Indians (Papago, Pueblo, Hopi) grew peppers, beans, corn, making soups, guacamole, piki, and barbecue sauce.

Cooked and seasoned food was preferred to raw food. Seeds, roots, flowers and grasses

were used to add flavoring to the cooking foods. The Pacific tribes used tender inner bark of hemlock and spruce while Southwest Indians used mesquite beans, cactus, yucca fruits, and agave for flavoring. Drying, freezing, smoking, and stone boiling were some early methods of cooking.

"Cooking the foods of many lands," also can give children a feeling of closer relationship to strange and unfamiliar peoples and cultures.

The opportunity to learn and prepare foods helps children to gain deeper insights and appreciations of various peoples and cultures of the world.



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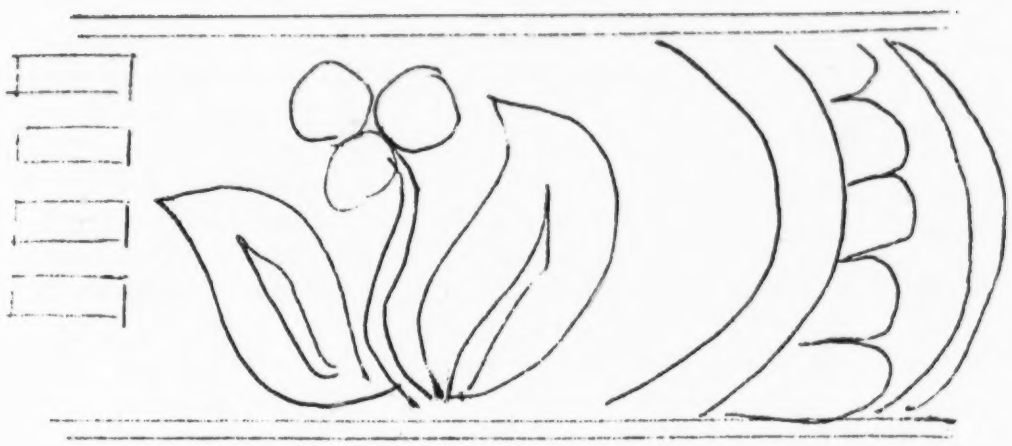

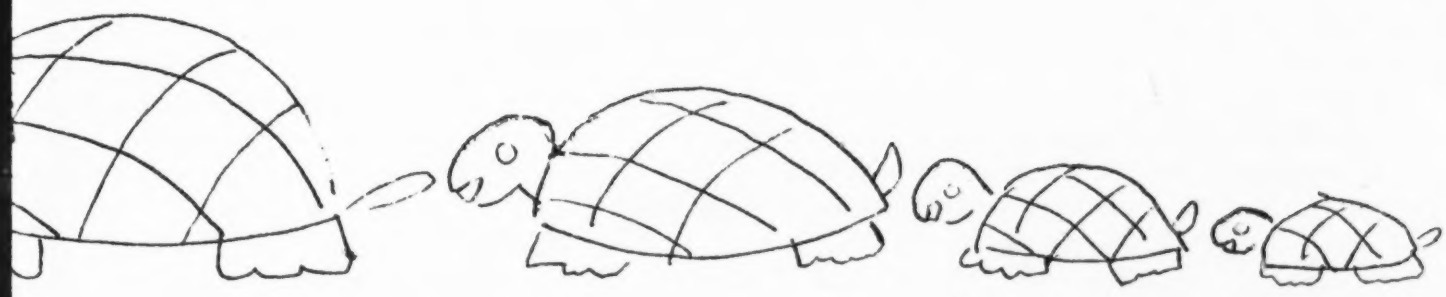

THE DEVELOPMENT OF MATHEMATICAL CON

The Curriculum guide for the kindergarten for Indian children is language centered. However, the mathematical objectives listed below reveal how the development of mathematical concepts is also an integral part of the child's continual growth in language.

It is more meaningful for children to have many opportunities to explore, experiment, and discover time in rote putation. Th background in understand an design a comp to integrate into larger games, experi children to

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I. <u>To begin to understand number concepts</u>

a. Counting (1 to 10).
b. Recognizing ordinal position (first, second, third).
c. Recognizing written numerals (1 to 10).
d. Reproducing cardinal counting by abstract symbols or numerals.

EXPERIENCES

1. Set tables for lunch, breakfast, or snack. At first teacher puts correct number of chairs around each table or the correct numbers of cups, spoons, etc. Child places them in position. When child knows about numbers, the teacher can tell the child how many places need to be set for each table. Still later in the year she can put the numeral on paper and place it on the table according to the direction.

2. Sing songs and use finger plays for counting to ten.

3. Capitalize on all opportunities for counting, such as counting while putting blocks a of paint other obj counting

4. Make pict charts fo tables, e

5. Trips are have gone ment comp of trucks driving, and lette

6. Develop g using mat onment (S

II. <u>To begin</u>

a. One to
b. Set as
c. Sorting (Sets)
d. Quantit by visu

e for the kindergarten for
language centered. How-
tal objectives listed be-
development of mathemati-
an integral part of the
rowth in language.

ul for children to have
to explore, experiment,

and discover their environment than to spend time in rote memorization or mechanical computation. The kindergarten teacher needs a background in mathematics and an ability to understand and work with children in order to design a complete program for her group and to integrate the program as much as possible into larger activities. The teacher plans games, experiences and activities to enable children to learn the desired concepts.

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it on the table accord-
tion.

se finger plays for

l opportunities for
s counting while putting

blocks away; setting and clearing easel of paint jars; counting scissors and other objects during work and play, counting sticks and stones.

4. Make picture, work, and numeral-recipe charts for cooking, planting, setting tables, etc.

5. Trips are very useful here. The children have gone on walks to the storage equipment compound, have counted the number of trucks, tanks, barrels, etc. When driving, they try to pick out numbers and letters on license plates and signs.

6. Develop games e.g. dominoes, puzzles, using materials from the natural environment (See Games to Make).

II. To begin to understand the set concept

a. One to one correspondence.
b. Set as a collection of objects.
c. Sorting and classifying collection (Sets) of objects.
d. Quantitative comparisons of two sets by visual inspection.

EXPERIENCES

1. Classifying through sorting articles brought in from environment: Stones, rocks, leaves, bark.

2. Counting children and playing a game in which they match boy to boy, girl to girl (pairs of clothing items, such as shoes, socks, moccasins).

3. Matching clothes, boots, mittens -- things that go together, dress up clothes in housekeeping area.

4. Develop "intellectual kits". These are collections of materials or objects (e. g. key kit) used to teach such skills as discrimination, reasoning, labeling, association, classification, etc.

III. <u>To begin to understand geometric concepts</u>.

a. Shapes: Square, Circle, Rectangle, Triangle
b. Ordering according to size and shape.

EXPERIENCES

1. Free play at flannel board with varied colored felt shapes.

2. Matching games and form boards reflecting shapes and sizes. (See Games to Make)

3. Collage pieces of different textures for pasting; matching size, shape, and textures.

4. Make cookies using variously shaped cookie cutters.

IV. <u>To begin</u>

a. Addition
b. Subtract

EXPERIENCES

1. Block play the relati units and

2. Dramatic p Arrange fo food carto

3. Table sett people at and dishes number of objects mi materials

V. <u>To begin t surement</u>.

a. Linear.
1. Shorte
2. Farthe

b. Volume.
1. Cup
2. Pint
3. Quart
4. Gallon

c. Weight.
1. Heavy-
2. Pound

d. Fraction
1. Whole
2. One ha
3. One fo

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form boards reflecting
(See Games to Make)

different textures for
size, shape, and tex-

variously shaped cook-

IV. To begin to understand basic operations.

a. Addition (informal).
b. Subtraction (informal).

EXPERIENCES

1. Block play - staff helps children see the relationship between units-double units and quads.

2. Dramatic play (store and trading post.) Arrange for quantities of empty cans and food cartons for play buying and selling.

3. Table setting. Children count number of people at their table and match utensils and dishes; a child tells teacher the number of children for whom materials or objects missing from full complement of materials needed at table.

V. To begin to understand concepts of measurement.

a. Linear.
   1. Shorter-longer
   2. Farther-nearer

b. Volume.
   1. Cup
   2. Pint
   3. Quart
   4. Gallon

c. Weight.
   1. Heavy-light
   2. Pound

d. Fractional parts.
   1. Whole
   2. One half
   3. One fourth, one quarter (optional)

EXPERIENCES

1. Collage with glue, string, yarn, paste.

2. Carpentry with pieces of wood of different lengths, thicknesses, and shapes.

3. Block play-reenacting railroad, wagon train, map making.

1. Make jello and pudding for small and large groups of children.

2. Prepare fruit juices in class.

3. Arrange containers of different volume for use in water and sand box play.

1. Teacher's interpretation during sand box and water play.

2. Weigh children on regular scale.

3. Weigh specific quantities of food.

1. Dramatic play and cooking.

2. Science demonstrations.

3. Block play-using correct names for size and shapes of blocks - quarter, half, full and double units.

4. Games: form boards using pictures of familiar objects

5. Geoboards

e. Time
   1. early
   2. day,
   3. hour
   4. yeste

f. Money
   1. names
   2. value
   3. barte

VI. To beg
lation

OBJECTIVE

a. under
b. on top
c. above
d. behind
e. in fron
f. in the
g. between
h. right -

1. Plan da
2. Plan fo
events.

1. Teacher'
tic play
2. Have rea
3. Take fie
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EXPERIENCE

1. Natural

* These are,
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ks - quarter, half, full

s using pictures of fam-

e. Time
   1. early-late
   2. day, week, month, year
   3. hour
   4. yesterday, today, tomorrow

f. Money
   1. names of coins
   2. values of coins
   3. barter, pawn

VI. <u>To begin to understand positional relationships*</u>

OBJECTIVES

a. under
b. on top of
c. above
d. behind
e. in front of
f. in the middle of
g. between
h. right - left

1. Plan daily schedule.
2. Plan for trips and special visitors and events.

1. Teacher's interpretations during dramatic play.
2. Have real money available.
3. Take field trips in small groups for actual purchasing of foods and materials.

EXPERIENCES

1. Natural conversation with children

* These are, of course, language concepts as well as mathematical.

2. Bus trips and field trips.

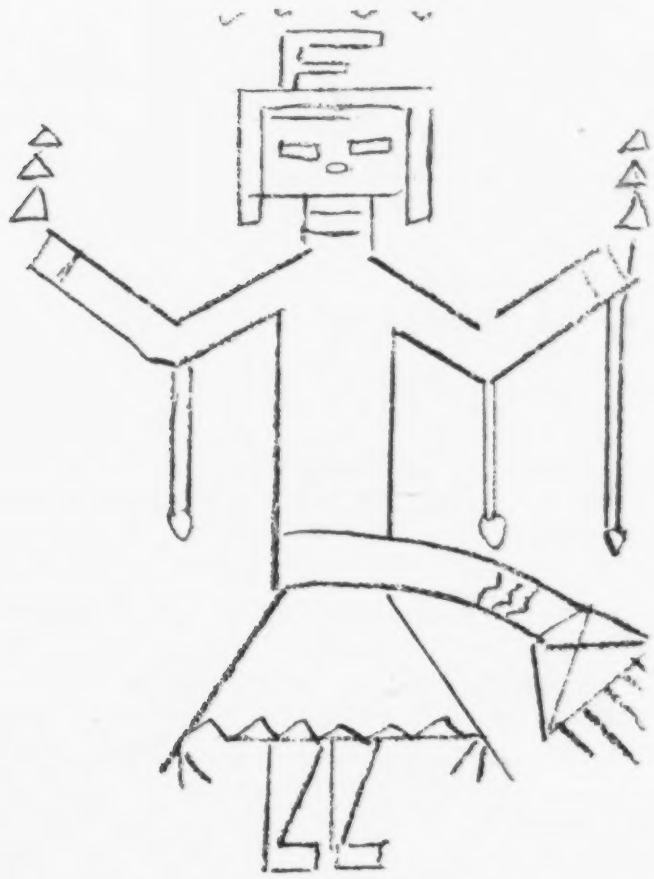
3. Informal game playing.

4. Block play and dramatic play

5. Make sandwiches.

6. Make jello with bananas or other fruit placed on top of jello.

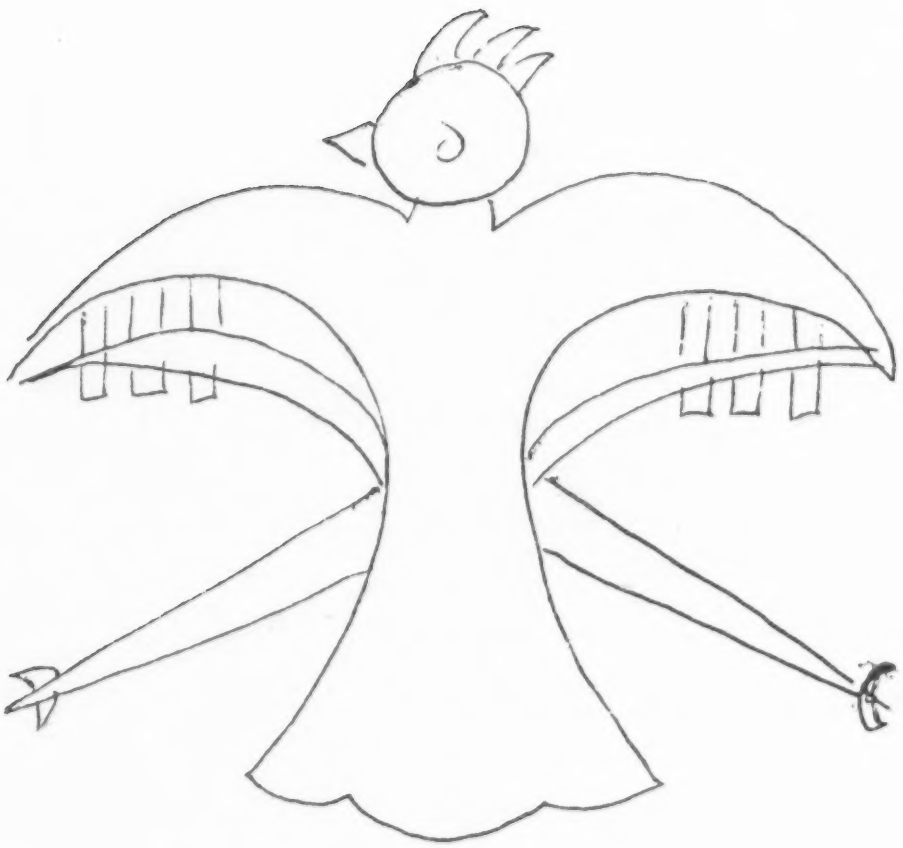
7. Table setting.

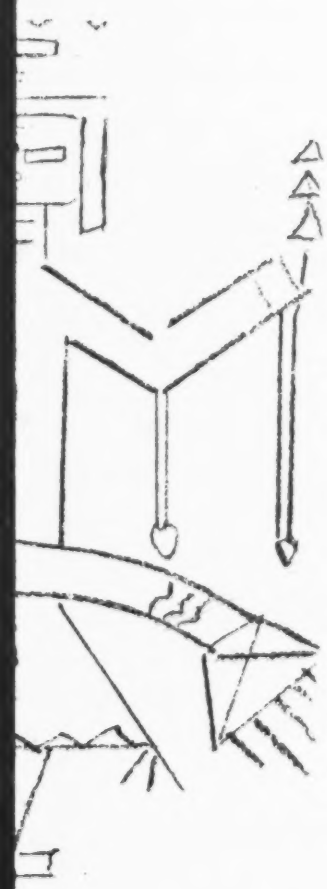


s.

play

or other fruit





THE DEVELOPMENT OF NATURAL AND PHYSICAL SCIENCE

In a curriculum guide focusing on Indian children in kindergarten centered in a bilingual and bicultural context, natural and physical science concepts are drawn from the familiar events and materials with which the child lives and extend to the significant discoveries in the larger world.

Specific objectives which can be achieved through the kindergarten year show the importance of language for thinking and analyzing general knowledge about the natural and physical sciences.

From the children's interests and questions and what the teacher already knows about what can be achieved, the science program develops. In the kindergarten setting science materials, demonstrations, and experiments are presented as simply as possible and a few at a time. This gives each child the opportunity to explore, experiment, discover, and arrive at conclusions for himself.

The kindergarten staff has the responsibility for stimulating and encouraging the child's natural curiosity to use all of his senses and to help him develop a questioning attitude.

"Let's find out," or "Let's see what happens," are effective approaches to science for young Indian children. These experiences should not be limited to set time segments, but should be incorporated into the child's daily curriculum life experiences. Science should include the tribal culture, with its explanations of phenomenon not readily understandable. In the folk tale "Why Rivers Flow But One Way," the Indians of the Puget Sound demonstrate clear and concise powers of observa-

tion. They have
rivers flowing o
the explanation

The young child,
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tion. They have witnessed the phenomena of rivers flowing one way; the problem lies in the explanation of this phenomena.

The young child, growing up on the reservation, brings to school a healthy respect for nature. His toys and games are based on the available resources of nature. His questions are satisfied with a combination of accurate observation and folk legend. These creative and exciting scientific explanations should be brought to the classroom by capitalizing on the child's observations and cultural heritage. His observations should be accepted, while not negating his folklore. The child feels free to raise questions, to explore, to make discoveries and to answer his questions. Experiences should be descriptive, beginning with what is familiar, and answering questions such as: "how big is it?" "what color is it?" "what does it feel like?" "...taste like?" "...smell like?" and "...look like?"

The total environment for the Indian child should be conducive to exploration of all the areas, that we as adults, have labelled "subjects." Although adults have compartmentalized the realms of information, and knowing, the child makes associations based on his cultural experiences.

An environment should be provided in which the child may explore an object in as many ways as possible. For example, a child who is allowed to explore the rich environment of the classroom, may discover a rattle made from a gourd in the music area. The gourd bridges many realms of knowing. The child tells you that the gourd is grown in the ground at a certain season of the year. Is

this not science? You talk with him about the similarities between this and other gourds; its size, shape, using descriptive vocabulary. Is this not language arts? You secure and open a gourd, examining the inside. He tells you that his mother uses gourds at home. Is this not social studies? You encourage him to tell you more, recording his language and his story about gourds. You count the number of seeds inside. Is this not mathematics? You talk about the sounds of various gourds. Is this not rhythm and music? Thus the gourd in the classroom provides the child with many opportunities to learn the skills and concepts essential to his development as a learner.

In encouraging or providing for science experiences, the teacher's objectives may include helping the child:

To be alert to his surroundings.

To further develop his basic senses.

To develop active questioning.

To make predictions.

To think logically, while recognizing and appreciating his intuitive understandings.

To appreciate and understand the natural environment.

To share his discoveries with others.

The experiences to be suggested should grow from the child's interests, his concerns, and the things he wishes to know. They should not be viewed as defined curriculum but as hints or suggestions for possible directions of exploration.

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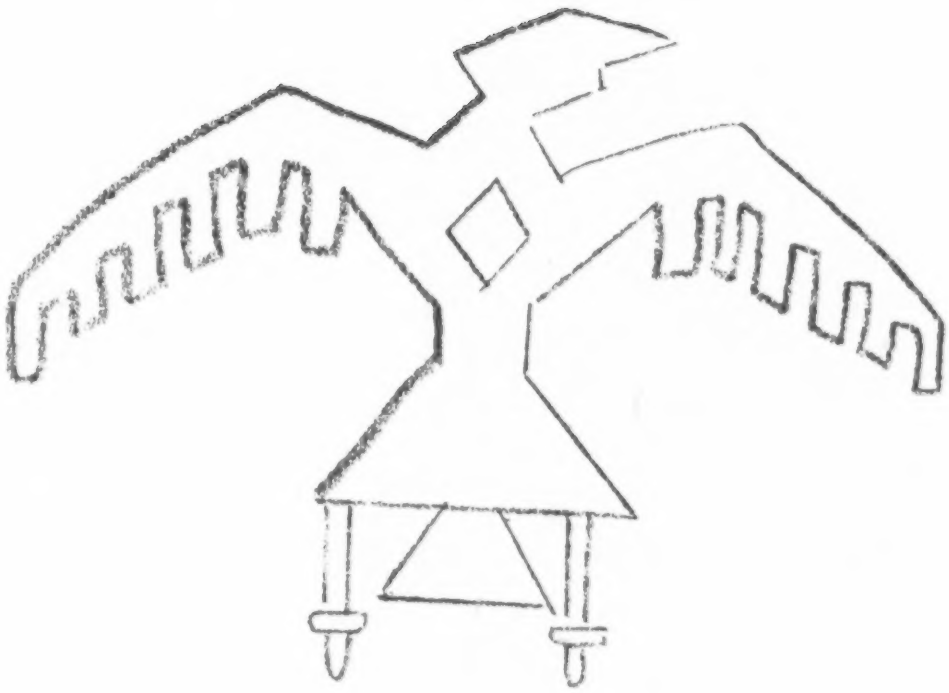

I Sensory Experiences:

Touch: Skin enables us to learn about our environment.

discussion: how does an object feel? describe experience of touchi
you are unable to see; what objects can you identify without seeing
identify people without seeing them?

experiences:

1. have a secret "feely" box containing an object that the child tr
without seeing it
2. let a blindfolded child identify members of the group.
3. let a blindfolded child identify and move through room.
4. provide objects of different temperatures to be handled.
5. select contrasting materials, exploring them with the children.
6. make believe that you are holding something and describe it.

materials:

gourds	pine cones	silver	corn husks	sand
sage brush	cocoons	pebbles	corn meal	ball
leaves	feathers	marbles	sand	flow
sunflower seeds	rocks	rocks	soil	bead
cotton flax	bark	wood	soap	fur

Smell: Noses help us to learn about our environment.

discussion: what do things smell like? what smells good? bad?

experiences:

1. allow children to smell contrasting odors having them describe i
2. blindfold a child and let him identify foods and other objects b
3. take a walk after shower and smell the scent of the wet earth.

materials:

flowers	pepper	soap	cleanser
fruit	bark	perfume	pine needles

o learn about our environment.

object feel? describe experience of touching an object
hat objects can you identify without seeing them? can you
seeing them?

" box containing an object that the child tries to identify

ild identify members of the group.
ild identify and move through room.
ifferent temperatures to be handled.
aterials, exploring them with the children.
u are holding something and describe it.

cones	silver	corn husks	sandpaper
ons	pebbles	corn meal	ball
hers	marbles	sand	flower
s	rocks	soil	beads
	wood	soap	fur

earn about our environment.

ngs smell like? what smells good? bad?

ell contrasting odors having them describe it.
d let him identify foods and other objects by their smell.
ower and smell the scent of the wet earth.

soap	cleanser
perfume	pine needles

Sound: There are many different kinds of sounds we hear.

discussion: what kinds of sounds there are? how do we know where sounds come from? what happens when things vibrate?

experiences:

1. have children identify sounds that they cannot see.
2. with eyes closed, have them identify voices.
3. have them describe and duplicate sounds.
4. have them listen to their own voices on a tape recorder.

Taste: Tongue and mouth help us learn about our environment.

discussion: what things do they like to taste? dislike? what tastes sweet? bitter? salty?

experiences:

1. provide an opportunity to taste a variety of contrasting food.
2. blindfold a child and let him try to identify the food, discuss textures.

materials:

fruit	pepper	corn	lemon
salt	mustard	squash	herbs

Sight: Eyes help us to learn about our environment.

discussion: how do you know where to go? how do you know not to fall over something? how do you know where you are?

experiences:

1. have children look at different objects, describing any differences.
2. look at objects with moving parts.
3. have children walk through an obstacle course.
4. have children look at different kinds of birds.

II Weather Cycle - rain, evaporation, cloud formation, hail, sleet, snow, water, ai

Rain: rain affects our environment

discussion: How does it feel to get wet? what happens when things get wet? what happens to the sky when it rains? what happens to the soil, sand when it rains? how does rain affect plants?

experiences:

1. Observe rain from the window.
2. Listen to sound of rain.
3. Notice how people dress and move in the rain.
4. Watch a puddle as water falls into it.
5. Watch what rain does to the soil.
6. Collect rain in a bucket.
7. Overwater soil, in the classroom, watching as the water causes the soil to float away.
8. Watch patterns of drying.

Snow: snow affects our environment

discussion: what does snow feel like? look like? taste like? what does snow do to cars? buildings? plants? soil? what are snowflakes shaped like?

experiences:

1. Have children play in the snow and observe it from window.
2. Collect snow flakes on a dark piece of fabric looking at their shape.
3. Make snow candy.
4. Watch how people dress and move in the snow.
5. Watch snow melt.
6. Notice how people walk in different kinds of snow (slushy, packed, dry, deep)
7. Notice how vehicles move in the snow.
8. Have children pretend to be falling snow and dramatize it.

Freezing
Cold: cold affects people and their environment.

discussion: describe how it feels to be in the cold. what happens to the earth when it is freezing cold? how do trees look in the freezing cold? how do people dress? what do animals do?

experiences:

1. Have children try to dig up some frozen earth.

2. Observe how people dress for the extreme cold.
3. Observe the color of the skin in the freezing
4. Observe the smoke coming from the mouth.
5. Talk about how fingers and feet feel in cold.
6. Observe frost on the windows.
7. Observe the ice on the ground, buildings.
8. Observe frozen clothing on a clothesline.
9. Let a dish of water freeze, allowing the child
10. Hang a shirt outside the room, till frozen; br see it.

Wind: wind affects people and their environment.

discussion: what happens to soil in a wind storm? in the wind? how do plants move in the wind? how

experiences:

1. Let children go out of doors on a windy day an on their heads.
2. Notice how people walk in the wind.
3. Notice how things fly about in the wind.
4. Listen to the sound of the wind.
5. Notice how wind feels on the skin.
6. Notice what wind does to water.
7. Place a strip of cloth outside the window and
8. Place a fan near a basin of water and watch th
9. Blow feather and other small pieces of objects
10. Make pin-wheels or kites.
11. Watch wind blow loose soil or sand indicating
12. Have children take a piece of paper and fan th faces and to note that wind is air in motion.

Air:[1] people and animals need air to live.

experience:

1. Ask children to hold their noses and mouths sh

air pushes things.

experiences:

people dress for the extreme cold.
color of the skin in the freezing cold.
smoke coming from the mouth.
how fingers and feet feel in cold.
st on the windows.
ice on the ground, buildings.
zen clothing on a clothesline.
of water freeze, allowing the children to handle it before and after.
t outside the room, till frozen; bring it in letting children feel,

ts people and their environment.

at happens to soil in a wind storm? to sand? how do people walk
ow do plants move in the wind? how does a kite fly in the wind?

n go out of doors on a windy day and try to walk about, or to keep hats
ads.
people walk in the wind.
things fly about in the wind.
he sound of the wind.
wind feels on the skin.
wind does to water.
ip of cloth outside the window and watch it blow.
near a basin of water and watch the ripples.
r and other small pieces of objects.
eels or kites.
blow loose soil or sand indicating erosion.
en take a piece of paper and fan themselves to feel the wind on their
o note that wind is air in motion.

animals need air to live.

n to hold their noses and mouths shut; discuss reaction.

.

1. Put paper on a table; turn on electric fan in the direction of the paper.
2. Go outside on a very windy day; feel the air push.
3. Put pin-wheel in the room ventilators.

air has weight.

<u>experience</u>:

1. Put a flat balloon between two blocks of wood; blow up the balloon. Watch th weight of the air in the balloon lift the blocks.

air evaporates moisture, (dries things)

<u>experience</u>:

1. Wash some doll clothes; hang them in the air.

air takes up space

<u>experience</u>:

1. Put a dry tissue or hanky in a glass. Invert in a bowl of water; the air kee the tissue dry.

air lifts things

<u>experiences</u>:

1. Fly a kite on a windy day.
2. Hold a streamer in the air on a windy day.
3. Watch airplanes in the sky.

air moves

<u>experiences</u>:

1. Spray an aerosol fresener in one corner of a room; smell the odor as it moves to other corners.
2. Watch smoke in the air.

moving air is <u>wind</u>

<u>experiences</u>:

1. Toss a hat into the wind.
2. Watch the leaves twirling.
3. Note clothes dancing on a line.
4. See hair blowing in the wind.

air has moisture

<u>experiences</u>:

1. Put ice cubes into an aluminum cup or tumbler; watch moisture form on outside of container.
2. Breathe on a pane of glass or mirror; see moisture.

air (oxygen) helps fires burn

<u>experience</u>:

1. Put a candle in a jar. Light it. Watch it burn until oxygen is used.

air has dust in it

<u>experience</u>:

1. Watch the rays of the sun as they come through the window. Note the dust particles.

air slows falling things

<u>experience</u>:

1. Make a small parachute from a spool and a handkerchief. Toss it in the air on a windy day and watch what happens.

SUBJECT

water has air in it

<u>experience</u>:

1. Fill a bottle with faucet water. Put the bottle on a windowsill. Watch the air bubbles rise to the top of the water.

<u>Water in Everyday Life</u> - water has many forms.

experiences:

1. Freeze ice cubes.
2. Boil water to make steam.
3. Let steam flow into a glass container; watch it burn back into
4. Bring snow into the room; let it melt into water.
5. Gather hail, if possible.
6. Walk in the dew.
7. Note the frost on window panes.
8. Watch icicles form and melt.

water has many uses (it helps people in many ways)

experiences:

1. Discuss the use of water in the following ways:

. cleaning	. drinking
. cooking	. quenching (fire)
. baking	. bathing
. scouring	. swimming
. painting	. skating
. sprinkling	

all living things need water

experiences:

1. Give it to:

. plants
. animals
. birds
. people

water expands when it freezes.

experience:

1. On a very cold day put two jars outside. Fill both with water. When the water in the covered bottle freezes, observe what it d

1 Dr. J. E. Kosoloski, Director of Bureau of General and Academic Educ
Charlotte C Garman, Editor Kindergarten Guide Pennsylvania Dept. of

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. quenching (fire)
. bathing
g . swimming
g . skating
ing

ater

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put two jars outside. Fill both with water. Put a lid on one.
the covered bottle freezes, observe what it does.

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rector of Bureau of General and Academic Education and Mrs.
itor Kindergarten Guide Pennsylvania Dept. of Education.

water gets into the air by evaporation

<u>experience</u>:

1. Fill two measuring cups with water. Put a lid o
   note the water line.

some things hold more water than others.

<u>experience</u>:

1. Put water in a clear bowl. Watch the water line
   stone. Do the same with a sponge, rubber, piece
   most water.

there is water in soil.

<u>experience</u>:

1. Put soil in a jar. Cover it tightly. Note drop

water mixes with some things.

<u>experience</u>:

1. Experiment with different powders (salt, sugar,
   syrup; note what happens.

some things float in the water.

<u>experience:</u>

1. Try a piece of wood, sponge, a stone, a feather

<u>Sun</u>: the sun affects people and their environment.

<u>discussion</u>: what does the sun do to people's skin?
do people dress in the sun?

<u>experiences</u>:

1. Play out of doors on a sunny winter day observi
2. Notice how the sun warms the soil.
3. Notice how sun affects plants.

o the air by evaporation

measuring cups with water. Put a lid on one. Watch both cups daily to
water line.

ld more water than others.

r in a clear bowl. Watch the water line before and after you put in a
Do the same with a sponge, rubber, piece of cloth. See which absorbs the
er.

in soil.

in a jar. Cover it tightly. Note drops of moisture that gather in the jar.

th some things.

nt with different powders (salt, sugar, baking soda, instant coffee) oil,
ote what happens.

oat in the water.

ece of wood, sponge, a stone, a feather, a plate.

affects people and their environment.

what does the sun do to people's skin? to soil? to sand? to plants? how
ess in the sun?

of doors on a sunny winter day observing how the sun feels on the skin.
ow the sun warms the soil.
ow sun affects plants.

4. Talk with a farmer or rancher about the sun.

Heat: heat affects man and his environment.

discussion: how do people feel in the extreme heat? how does soi
extreme heat? how do people dress in heat? how do you keep the w

experiences:

1. Observe how the sun feels on a very hot day.
2. Observe people perspiring.
3. Notice how much people drink on hot days.
4. Find ways to cool off.

the sun gives heat.

experiences:

1. Stand in hot sun.
2. Feel the earth and pavement in the heat.
3. Put a cold pan in the sun; let it stand ten minutes. Then fee
4. Put chocolate candy in the sun.
5. Put a candle on a tray. Let it stand in the sun.

we can make heat.

experiences:

1. Look at the school furnace.
2. Light a small fire (outdoors).
3. Rub your hands together briskly.
4. Light a candle.
5. Breathe into your hands.

heat changes the form of some things.

experiences:

1. Cook apples into sauce.
2. Fry an egg.
3. Put milk in heat; watch it curdle.
4. Toast some bread.
5. Bake a cake.
6. Make bread.

r rancher about the sun.

d his environment.

le feel in the extreme heat? how does soil and sand feel in
ople dress in heat? how do you keep the windows in heat?

feels on a very hot day.
iring.
le drink on hot days.
f.

avement in the heat.
e sun; let it stand ten minutes. Then feel it.
in the sun.
ay. Let it stand in the sun.

urnace.
outdoors).
her briskly.

nds.

ome things.

ce.

tch it curdle.

heat dries things

experiences:

1. Put a wet cloth on the radiator or ventilator.
2. Put a pan of mud in the sunlight.
3. Put a piece of bread on the windowsill or radiator.
4. Wash hands; hold them under a drier.

heat is useful.

experiences:

1. Discuss heat in the home and school for:

. ironing
. cooking
. healing
. heating
. sterilizing

III Seasons: Examples of a seasonal activity - Fall
Winter
Spring
Summer
Fall

Harvest:

discussion: what do farmers do at harvest time? what do t
tures; where do the things come from?

experiences:

1. Bring materials appropriate to the harvest to the clas
   to the children, others.
2. Allow children to touch the materials.
3. Give Indian and Anglo name for the material.
4. Contrast the feeling of one fruit with another.
5. Open the fruit, or vegetables to look at seeds.

IV Plants -- plants are growing things
growing things need water, light, food
there are different kinds of plants
some plants are cultivated, others grow wild
different types of plants require different environme
plants have several parts

on the radiator or ventilator.
d in the sunlight.
bread on the windowsill or radiator.
d them under a drier.

the home and school for:

ing . heating
ing . sterilizing
ing

s of a seasonal activity - Fall

:

farmers do at harvest time? what do they harvest? describe tex-
things come from?

appropriate to the harvest to the classroom grown locally, familiar
, others.
to touch the materials.
Anglo name for the material.
eling of one fruit with another.
or vegetables to look at seeds.

re growing things
need water, light, food
rent kinds of plants
cultivated, others grow wild
of plants require different environments
eral parts

discussion: how does a plant get food? what happens if a plant g
not enough water? what happens when a plant grows in the dark? i
different? what plants are cultivated? what plants grow in the w
affect some plants? how does heat affect some plants? what kinds
cold places? what kinds of plants grow in hot places? what are t
of plants?

experiences:

1. Over-water a plant and observe what happens.
2. Under-water a plant and observe what happens.
3. Place a plant in the dark, observing what happens.
4. Place a plant in the refrigerator observing what happens.
5. Ask local people what they plant.
6. "Adopt" a tree. Pick a tree and observe it each month. Draw
   and record changes.
7. Walk in the forest, or desert, looking for wild plants and flo
8. Take apart a plant, pointing out the various parts.
9. Grow a variety of plants in the classroom.
10. Plant parsley seeds in a sponge, keeping the sponge moist and
    be covered with foliage.
11. Build a desert terrarium in a large jar with cactus plants and
12. Build a marsh terrarium in a large jar with a piece of glass f
    of wood, and moist rich soil is necessary. Place small plants
    into soil; keep near a window where it will not receive direct
13. Transplant from indoors to outdoors.

Animals: animals are living things
animals need food, water, air
there are different kinds of animals
some animals are domesticated, others live in the wild
different animals require different environments
some animals have fur, others have feathers or skin
animals protect themselves in different ways - home builders
fast runners, hibernation, good fighters, color

discussion: what kinds of food do different animals eat? how do
look? their colors? their skin? how do they move? what are the
what kind of homes do they build? what animals are domesticated?
in the wild? how does an animal protect himself by building a home
by hibernating? by changing color? by being a good fighter? wha
different things? how do animals and growing things reproduce the

does a plant get food? what happens if a plant gets too much or
what happens when a plant grows in the dark? how do plants look
plants are cultivated? what plants grow in the wild? how does cold
s? how does heat affect some plants? what kinds of plants grow in
t kinds of plants grow in hot places? what are the different parts

plant and observe what happens.
plant and observe what happens.
in the dark, observing what happens.
in the refrigerator observing what happens.
ple what they plant.
e. Pick a tree and observe it each month. Draw pictures to observe
anges.
rest, or desert, looking for wild plants and flowers.
plant, pointing out the various parts.
of plants in the classroom.
seeds in a sponge, keeping the sponge moist and watch the sponge
h foliage.
terrarium in a large jar with cactus plants and sand.
terrarium in a large jar with a piece of glass for a cover; a block
oist rich soil is necessary. Place small plants (fern, moss, lichen)
p near a window where it will not receive direct sunlight.
m indoors to outdoors.

e living things
ood, water, air
erent kinds of animals
re domesticated, others live in the wild
als require different environments
ave fur, others have feathers or skin
t themselves in different ways - home builders
hibernation, good fighters, color

kinds of food do different animals eat? how do different animals
s? their skin? how do they move? what are their footprints like?
do they build? what animals are domesticated? what animals live
does an animal protect himself by building a home? by running fast?
y changing color? by being a good fighter? what animals do these
how do animals and growing things reproduce their kind?

experiences:

1. Have a variety of animals in the classroom (ger
   rabbit, snakes, worms, insects,) allowing the c
   animals when possible).
2. Talk about animals the children have as pets.
3. Build different kinds of animal homes.
4. Look and listen to birds in the wild.
5. Take a field trip counting all the wild animals
6. Notice the footprints of animals in the wild.
7. Talk about the way different animals get their
   of beaks.
8. Watch how different animals move, trying to imi
9. Observe the color of different animals.
10. Visit a zoo, forest, desert, searching for anim
11. Visit children's homes. Take pictures of them
    a story about their pet.
12. To show children that living things have babies
    guppies, tadpoles, kittens being born.

Our Bodies - our bodies are made up of many parts.

experiences:

1. Have children look at themselves and each other
2. Let children use a stethoscope to listen to the
3. Talk about and how pictures of the brain and lu

our bodies need good care

experiences:

1. Show a film or filmstrip about good eating habi
2. Take daily exercise and rest.
3. Show children who are not clean how to care for
   corner with a mirror, comb, brush, washcloth, e
4. Have a good breakfast party to emphasize import
5. Emphasize and practice frequent washing of hand
6. Practice brushing of teeth.
7. Work in a dark room, then a light room. Discus

many people help us to care for our bodies

riety of animals in the classroom (gerbils, hamster, bird, guinea pig,
nakes, worms, insects,) allowing the children to care for them (use local
hen possible).
t animals the children have as pets.
ferent kinds of animal homes.
listen to birds in the wild.
eld trip counting all the wild animals.
e footprints of animals in the wild.
t the way different animals get their food, noticing different kinds

different animals move, trying to imitate their movements.
he color of different animals.
oo, forest, desert, searching for animals.
ldren's homes. Take pictures of them and their pets. Children write
bout their pet.
hildren that living things have babies like themselves, hatch eggs, watch
tadpoles, kittens being born.

r bodies are made up of many parts.

dren look at themselves and each other. Identify visible body parts.
ren use a stethoscope to listen to their hearts.
t and how pictures of the brain and lungs.

good care

lm or filmstrip about good eating habits, exercise, rest.
y exercise and rest.
dren who are not clean how to care for themselves. (Have a health
th a mirror, comb, brush, washcloth, etc.).
od breakfast party to emphasize importance of proper diet.
and practice frequent washing of hands.
brushing of teeth.
dark room, then a light room. Discuss the difference.

p us to care for our bodies

experiences:

1. Invite the doctor, dentist, nurse, dental hygienist, physical visor to talk with the children. Visit their school headquart
2. Visit the cafeteria to see the food personnel at work.
3. Watch the custodian scrub, clean, sweep the building.
4. Walk through the neighborhood; observe the street cleaners, wi

we can help to protect ourselves

experiences:

1. Have a "clean-up" brigade in the playground.
2. Show filmstrips of playground safety.
3. Emphasize and practice putting left-over food, apple cores, mi proper containers for disposal.

Sounds[1]- sounds are made by vibration.

experiences:

1. Call, sing, whisper, shout, put hands on throat and feel neck.
2. Strike a tuning fork. Put it in water. Watch!
3. Pluck a stretched rubber band or a stringed instrument.
4. Open piano; strike keys; watch the hammers.
5. Beat a drum.
6. Ring a bell.
7. Place a yardstick on a table with half of it extending over th the children strike the protruding edge. Observe the movement

sounds may be loud or soft, high or low, shrill or gentle

experiences:

1. Turn up the T.V., radio or record player.
2. Sing loudly and softly.
3. Whisper, shout.
4. Stamp feet on floor rapidly, slowly.
5. Experiment with rhythm instruments.

sounds are everywhere

experiences:

r, dentist, nurse, dental hygienist, physical education super-
th the children. Visit their school headquarters.
ria to see the food personnel at work.
ian scrub, clean, sweep the building.
neighborhood; observe the street cleaners, window washers.

ourselves

' brigade in the playground.
of playground safety.
actice putting left-over food, apple cores, milk boxes, etc. in
s for disposal.

de by vibration.

per, shout, put hands on throat and feel neck.
fork. Put it in water. Watch!
d rubber band or a stringed instrument.
ke keys; watch the hammers.

on a table with half of it extending over the edge. Have
ike the protruding edge. Observe the movement called "vibration".

soft, high or low, shrill or gentle

radio or record player.
softly.

or rapidly, slowly.
hythm instruments.

1. Listen to room sounds.
2. Tour the playground and identify sounds.
3. Walk around the block to discover st-eet sounds if in ci
4. Show filmstrip about sounds.

Magnets - magnets attract objects made of some metals

experience:

1. Place a collection of items - nails, buttons, seeds, cli tacks, pegs, crayons, wire - on a table. Let children s attracts.

magnets attract through some metals

experience:

1. Put a piece of paper, a sheet of wood or plastic or a gl magnet and the objects listed above. See whether the ma the items.

there are different kinds of magnets

experience:

1. Provide a variety of magnets for children to see.

magnets are useful to man

experience:

1. Find magnets in the room (on doors, bulletin boards, ma

Machines - machines make work easier for people

experiences:

1. Look at and use simple machines that Mother may use:

. can opener
. mixer
. nut cracker
. needle

s.
and identify sounds.
k to discover street sounds if in city.
sounds.

objects made of some metals

f items - nails, buttons, seeds, clips, baby pins, thumb
, wire - on a table. Let children see which ones the magnet

me metals

, a sheet of wood or plastic or a glass plate between the
ts listed above. See whether the magnet will still attract

of magnets

magnets for children to see.

room (on doors, bulletin boards, magnetic toys, games).

ork easier for people

le machines that Mother may use:

- knife and fork
- scissors
- clothesline
- sweeper
- curtain rod
- iron
- mop
- broom
- dustpan
- toaster
- washer
- dryer

that Father may use

- hammer
- saw
- shovel
- rake
- automobile jack
- vise
- screwdriver

that we all may use

- stairway
- car
- ramp
- doorknob
- pencil sharpener
- toothbrush
- comb

some machines are used for fun

<u>experiences</u>:

1. Locate and demonstrate toy machines in the kindergarten:

- trains
- doll carriages
- wagons
- tricycles
- wind up toys
- trucks
- seesaw
- rollerskates

some machines give us comfort

<u>experiences</u>:

1. Use a rocking chair.
2. Take an elevator or an escalator ride.
3. On a hot day bring in an electric fan.
4. Make ice cream with a hand or an electric freezer.
5. Turn on a faucet to get water!

To assist the teacher the following classifications of simple machines should not be expected to remember them.

k

- curtain rod
- iron
- mop
- broom
- dustpan
- toaster
- washer
- dryer

- automobile jack
- vise
- screwdriver

- pencil sharpener
- toothbrush
- comb

d for fun

nstrate toy machines in the kindergarten:

- wind up toys
- trucks
- seesaw
- rollerskates

s

comfort

air.
r or an escalator ride.
ing in an electric fan.
with a hand or an electric freezer.
t to get water!

e following classifications of simple machines are listed. Children
o remember them.

Lever

Claw-hammer
Nut Cracker
Can Opener
Shovel
Seesaw
Crow-bar

Inclined Plane

Stairway
Sloping boards, ladders
Hill
Slide
Ramps
Rocks
Logs
Tree trunks

Pulley

Flag Pole
Window Curtains
Clotheslines
Tow Trucks

Wheel and Axle

Doorknob
Roller skates
Pencil sharpener
Back wheel of a car
Bicycle

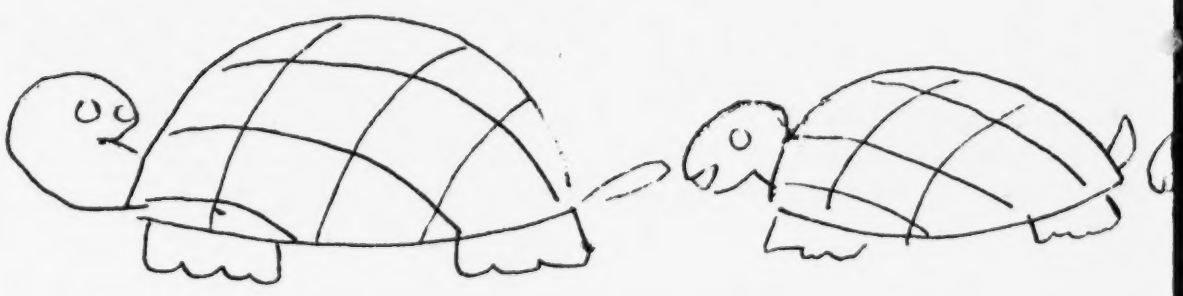
Screw

Automobil
Paper Pre
Piano St
Vise

Wedge

Axe
Needles
Knives
Chisel

1 Dr. J. E. Kosoloski, Director Bureau of General and Academic
Garman, Editor Kindergarten Guide Pennsylvania Dept. of Educa

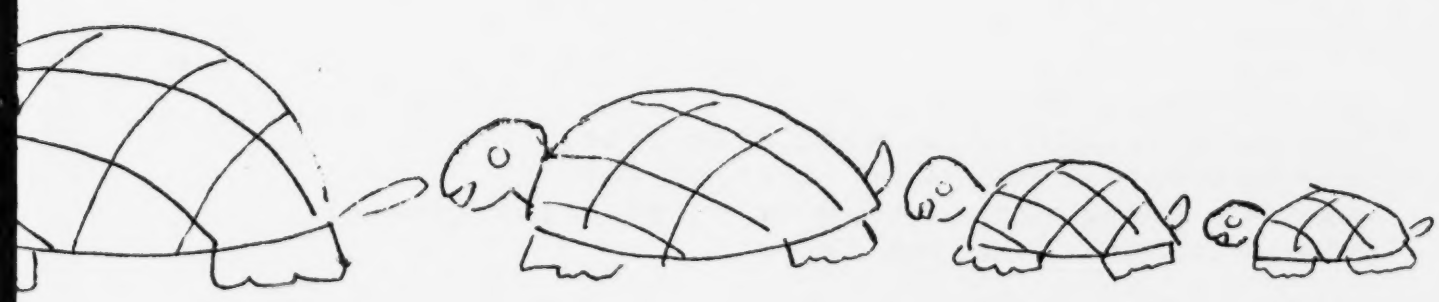


Pulley	Screw
Flag Pole	Automobile Jack
Window Curtains	Paper Press
Clotheslines	Piano Stool
Tow Trucks	Vise

Wheel and Axle	Wedge
Doorknob	Axe
Roller skates	Needles
Pencil sharpener	Knives
Back wheel of a car	Chisel
Bicycle	

adders

i, Director Bureau of General and Academic Education and Mrs. C. G.
dergarten Guide Pennsylvania Dept. of Education.



SCIENCE AS A HOBBY
Some Suggestions for Kindergarten Teac

A. Sources of Science Materials

1. The earth's crust:
rocks, pebbles, minerals, fossils, vari-colored soils, sand, t

2. Plant life:
grasses, weeds, wild flowers, trees, garden flowers, garden v
seed pods, cactus, guava.

3. Insect life:
spiders, ants, beetles, moths and butterflies, (silkworms), w
mosquitoes, mites, tics.

4. Bird life:
bones and feathers, nests, bird-watching, Audubon cards, feed
baths.

5. Miscellaneous animal life:
snails, worms, lizards, turtles, tadpoles, fish, and other fr
dogs, rabbits, fisheggs.

6. The sky:
clouds, stars, constellations, color, dust.

7. Household chemicals:
baking soda, washing soda, bleaches, iodine, vinegar, chalk,
salt, steel wool, pennies and dimes, silver polish, limewater
charcoal, preservative such as alum.

8. Toys, tools and other mechanical gadgets:
clocks and watches, wind-up toys, floating toys, jet-propelle
things with wheels, pulleys, conveyor belts, gears.

9. Rhythm instruments and other sound makers:
rubber bands, cigar boxes, metal spoons, empty bottles, rattle
and blocks, sandpaper, pan lids.

10. Beachcomber specimens:
sand, bivalve and univalve shells, starfish, sand "bugs", bea
sculptured stone, sanded glass, seaweeds.

SCIENCE AS A HOBBY
Some Suggestions for Kindergarten Teachers

ce Materials

ust:
, mi erals, fossils, vari-colored soils, sand, tundra, ice, seawater.

, wild flowers, trees, garden flowers, garden vegetables, seeds and
tus, guava.

beetles, moths and butterflies, (silkworms), water insects, flies,
tes, tics.

hers, nests, bird-watching, Audubon cards, feeding stations, bird

animal life:
lizards, turtles, tadpoles, fish, and other fresh-water creatures,
fisheggs.

constellations, color, dust.

icals:
ashing soda, bleaches, iodine, vinegar, chalk, vegetable dyes, sugar,
ol, pennies and dimes, silver polish, limewater, ammonia, sulphur,
ervative such as alum.

other mechanical gadgets:
hes, wind-up toys, floating toys, jet-propelled toys, common tools,
eels, pulleys, conveyor belts, gears.

nts and other sound makers:
igar boxes, metal spoons, empty bottles, rattles, bells, sticks,
dpaper, pan lids.

cimens:
nd univalve shells, starfish, sand "bugs", beach hoppers, driftwood,
e, sanded glass, seaweeds.

225

226

B. Simple Equipment to Work With

1. Containers:
aluminum foil pans, egg cartons, cigar boxes, plastic jars a
butter jars with covers, mason jars, pickle bottles, milk ca
hosiery boxes, thread cartons, tin juice cans, tin coffee ca

2. Tools:
magnifying glass, spoons, metal or plastic screening, knife,
blade, scissors, (low power microscope, if possible). In Al
ripening lamp would be excellent.

C. Sample Activities

1. Collections:
rocks, shells, seeds, etc., arranged in egg crates or other

2. Plaster of Paris projects:
fish and seashell molds, fossils (casts and imprints).

3. Flower projects:
pressed flower compositions, 3-D flower collections, crayon-
wax paper flower and leaf transparencies.

4. Seed projects:
seed hunts (how many kinds?), bottle cap exhibits, seeds we
seed travelers (for autumn) seed pictures (mosaics, using r
etc.)

5. Experiments with growing plants:
lima beans on blotters, grass seeds on plastic sponge, swee
water, slips from geranium, begonia, etc., citrus garden (c
fruit, orange, and lemon sprouts), "mystery" plants.

6. Bug motels:
home for living specimens.

7. Ant village:
jar of anthill soil, ants, tiny moist sponge, sugar or meal

8. Worm farm:
box of garden soil with living worms, cornmeal, some moistu

Work With

, egg cartons, cigar boxes, plastic jars and bottles, peanut
overs, mason jars, pickle bottles, milk cartons, flower pots,
ead cartons, tin juice cans, tin coffee cans with lids.

spoons, metal or plastic screening, knife, single-edge razor
low power microscope, if possible). In Alaska an ultra violet
d be excellent.

ds, etc., arranged in egg crates or other cartons.

projects:
molds, fossils (casts and imprints).

positions, 3-D flower collections, crayon-resist illustrations,
and leaf transparencies.

any kinds?), bottle cap exhibits, seeds we eat, seeds we spit out,
r autumn) seed pictures (mosaics, using rice, barley, beans, peas,

growing plants:
ters, grass seeds on plastic sponge, sweet potato or a yam in
geranium, begonia, etc., citrus garden (can of soil with grape-
d lemon sprouts), "mystery" plants.

pecimens.

il, ants, tiny moist sponge, sugar or meal, placed in pan of water.

l with living worms, cornmeal, some moisture

9. *From "worm" egg to silk:
spring project beginning with silkworm eggs (available from a b
company.
*Note: Try this only if mulberry leaves are available.

10. Pets, wild and tame:
ducks, (fascinating though messy), birds (seed-eaters, fruit-ea
terrarium or aquarium, miniature aquaria.

11. Home-made chemical set:
orange crates, hose, bucket, household chemicals, salvaged equi
area, fire extinguisher and alcohol lamp if flame is permitted)

12. "Engineering" projects:
"Rube Goldberg" machines from odds and ends (very creative fun
older boys).

13. Rhythm orchestra:
salvaged materials used for child-made instruments.

14. Art-science projects:
mosaics using pebbles, shells, plant materials, etc., (glue the
cardboard or press into a mastic), olive bottles filled with wa
colored glass or colored beach pebbles, leaf prints (ink and cr
window sill boxes (using sand, driftwood, stones, shells).

And -- many other activities which children and teachers will think a
as science hobbies get underway. Included are some of the above proj
ones, and much background material, written for "middle-aged" childre
grades in the elementary school) in the following books, published by

ELIZABETH K. COOPER - Author of

Minerals 194
Science in Your Own Back Yard 195
Discovering Chemistry 195
Science on the Shores and Banks 196

Magazine - Ranger Rick from National Wildlife Associa

silk:
nning with silkworm eggs (available from a biological supply

ly if mulberry leaves are available.

:
though messy), birds (seed-eaters, fruit-eaters, meat-eaters),
um, miniature aquaria.

set:
, bucket, household chemicals, salvaged equipment (fireproof
sher and alcohol lamp if flame is permitted).

cts:
hines from odds and ends (very creative fun especially for

used for child-made instruments.

s:
es, shells, plant materials, etc., (glue the specimens to heavy
into a mastic), olive bottles filled with water - worn bits of
lored beach pebbles, leaf prints (ink and crayon) seaweed gardens,
using sand, driftwood, stones, shells).

ies which children and teachers will think about or invent as soon
derway. Included are some of the above projects, some additional
material, written for "middle-aged" children (those in the middle
school) in the following books, published by Harcourt, Brace & Co.

ELIZABETH K. COOPER - Author of

Minerals	1943
Science in Your Own Back Yard	1958
Discovering Chemistry	1959
Science on the Shores and Banks	1960

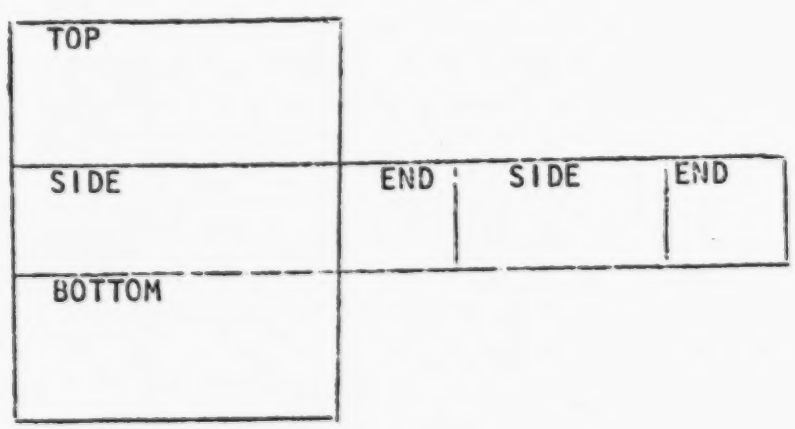
- Ranger Rick from National Wildlife Association.

ONE PIECE ALL SCREEN ANIMAL

Procure a metal pan or tray (easily washable) to receive dirt or droppings. This may be a tin cookie pan, baking pan with low sides, a serving tray, or waste porcelain crumb tray from an old stove. The size of this pan determines the size of the cage as it serves for the base.

By screening of welded wire grid 1/2" x 1" of adequate dimensions to make a desirably sized cage. Lay the screen over the tray and determine the number of wires each way which will fall within the limits of the base tray, allowing a half inch overage.

On a piece of paper draw a pattern based on the units of wire rectangles in each of the six panels of the cage. The sides of the cage are laid out in four panels end to end with a bottom panel adjacent to one side on the right and a top panel adjacent to the same side on the left. Your layout will look like this.



Pattern

Make the
extend t
wire in
used to

Make the
edge of
of a woo

Use smal
ends of
panel's
pair of
may be t
tight an

Disregar
is compl
snips or
trimming
waste so
the pen

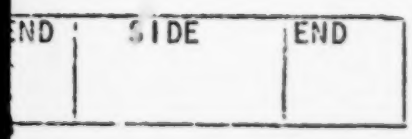
Note: T
wire (ra
is not s
The diar
the exte
pets hou
only we

ONE PIECE ALL SCREEN ANIMAL CAGE

r tray (easily washable) oppings. This may be a g pan with low sides, a e porcelain crumb tray he size of this pan de- the cage as it serves

d wire grid 1/2" x 1" of o make a desirably sized over the tray and deter- res each way which will s of the base tray, al- erage.

raw a pattern based on angles in each of the e. The sides of the four panels end to end djacent to one side on anel adjacent to the . Your layout will look



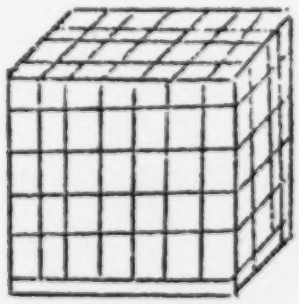
Make the cut so the stub ends of wires will extend the full half inch beyond the last wire in the panel. These wire stubs are used to bind the edges together.

Make the bends by laying the wire at the edge of the panel exactly on the square edge of a wooden box and tap with a hammer.

Use small narrow nose pliers to wrap stub ends of wire tightly around the adjacent panel's edge wire. (It pays to have a good pair of pliers for this job.) Each wire may be twisted around until the end lies tight and does not present a scratch hazard.

Disregard the door until the entire cubicle is complete. Then cut opening with wire snips or nippers and attach the door made by trimming an overlapping panel from the waste screen. The cost of cage material of the pen on display was $2.50.

Note: The present grade of half inch square wire (rabbit mesh) available at all stores is not satisfactory for the base of pet pens. The diameter of the wire has been thinned to the extent that it will cut the feet of any pets housed therein. The market now affords only welded grid in a satisfactory grade.



--Docia Zavitkovsky

A CARRYING CASE

Do you like to carry an animal to your story time?

Do you borrow creatures from your neighbors?

Do you want kitty to take a trip with you?

<u>You can make a simple case</u>

<u>Use</u>

1 apple box
2 small hinges and screws
2 screen door hooks
brads
1/4" mesh wire (approximately 20" x 24")
staples

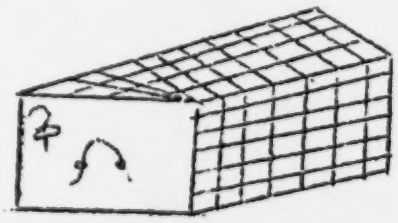
<u>To make</u>

1. Remove both sides

2. Make one side into door by attaching hinges and screen door hooks.

3. Staple 1/4" mesh wire over top and open side.

4. Attach screen door pulls on ends for carrying.



AN INSECT CASE

An easy insect cag
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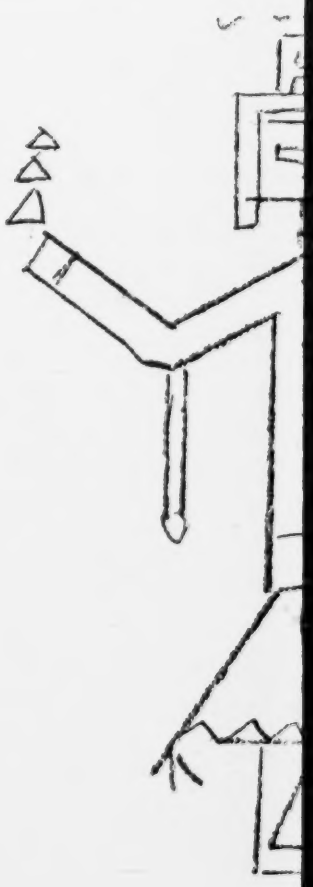

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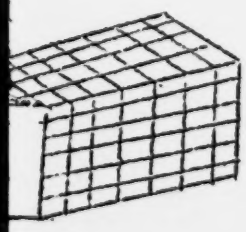
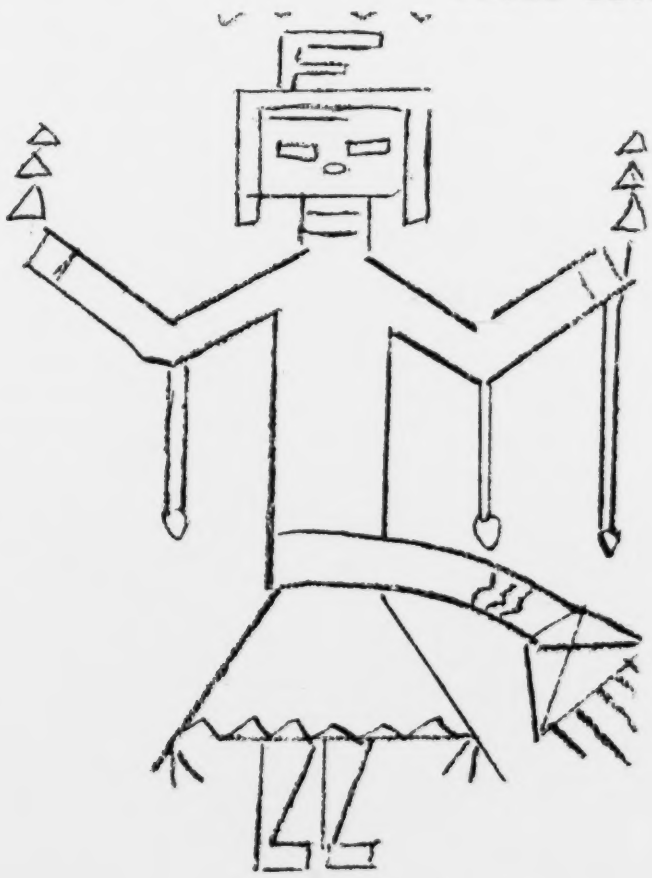


INSECT CASE

An easy insect cage can be made of a wire cylinder with old cake pans at the top and bottom. (peanut butter jar covers will do) Old motion picture containers can be used instead of cake pans. Use a piece of screen that is just long enough to form a cylinder that will fit into the pans.

Overlap the ends of the screen about a half inch; fasten together with brass paper fasteners or "sew" them with a fine wire. Set the cylinder in one pan and use the other for a lid.

-- Docia Zavitkovsky



Additional Supplies:

Fish nets
Large jars
Plastic containers
Plants
Soil
Sand
Frog
Insects
Spiders
Butterfly
Cocoons
Leaves
Sea Shells
Rocks
Minerals
Flashlights
Batteries
Wire
Lock and key
Door latch
Mechanical tools
Combs
Bottles and corks
Bottle stoppers
Water trough
Medicine droppers
Cups
Pulleys
Scales
Clock
Bells
Wheels
Starfish

Old radio
Egg beater
Flour sifter
Plastic bottles
Measuring spoons
Measuring cups
Pine cones
Cotton (flax)
Honeycombs
Ant colony
Bee colony
Buttons
Zippers
Bird nests
Insect nests
Racks
Fan
Nails
Fabric
Balloons
Sponge
Fur
Fruit
Vegetables
Clothesline
Arrowheads
Bows
Basin
Pail
Straws
Clay
Tea strainer
Clam shells

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Old radio
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Flour sifter
Plastic bottles
Measuring spoons
Measuring cups
Pine cones
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Bee colony
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Bird nests
Insect nests
Racks
Fan
Nails
Fabric
Balloons
Sponge
Fur
Fruit
Vegetables
Clothesline
Arrowheads
Bows
Basin
Pail
Straws
Clay
Tea strainer
Clam shells

Kettle with spout
Colander
Pebbles
Marbles
Tin cans
Scoops
Farming tools
Milk cartons
Egg cartons
Salt
Sugar
Chalk
Thread
Spools
Jar covers
Blotter
Cork
Water
Screwdriver & screws
Iron filing
Food coloring
Paint
Telephone
Axe
Fire extinguisher
Whale bones
Fish spines
Antlers
Horns
Sheep skins
Hides
A cold box to keep frozen things

INSECT STORIES

Hunting, Harriet	LET's GO OUTDOORS	Doubleday
Marcher, Marion	MONARCH BUTTERFLY	Holiday
McClung, Robert	SPHINX, STORY OF A CATERPILLAR	Marrow
McClung, Robert	TIGER, STORY OF A SWALLOWTAIL	Marrow
Podendorf, Illa	TRUE BOOK OF INSECTS	Children'
Williamson, Margaret	FIRST BOOK OF BUGS	F. Watts
Ipcar, Dahlov	WORLD FULL OF HORSES	Doubleday
Podendorf, Illa	TRUE BOOK OF PETS	Children'

BROOK AND POND

Flack, Marjorie	TIM TADPOLE	Doubleday
McClung, Robert	BUFO: STORY OF A TOAD	Marrow

EGGS THAT HATCH

Berg, Jean	BABY SUSAN'S CHICKEN	Wonder Bo
Schloat, Warren	THE WONDERFUL EGG	Scribner

SEEDS AND PLANTS AND TREES

Cormao, M. B.	FIRST BOOK OF TREES	F. Watts
Downer, Louise	THE FLOWER	W. R. Sco
Simon, Norma	TREE FOR MEN	Lippincot
Webber, Irma	BITS THAT GROW BIG	W. R. Sco
Webber, Irma	UP ABOVE AND DOWN BELOW	W. R. Sco
Zim, Herbert	WHAT'S INSIDE OF PLANTS	Morrow

SEASONS

Blough, Glenn	WAIT FOR THE SUNSHINE	McGraw
Lenski, Lois	I LIKE SUMMER	Oxford
Lenski, Lois	I LIKE WINTER	Oxford
Lenski, Lois	NOW IT'S FALL	Oxford
Lenski, Lois	SPRING IS HERE	Oxford
Schlein, Miriam	DEER IN THE SNOW	Abelard-S

BIBLIOGRAPHY OF SCIENCE BOOKS FOR YOUNG CHILDREN

LET's GO OUTDOORS	Doubleday	1939	$3.50
MONARCH BUTTERFLY	Holiday	1954	$2.95
SPHINX, STORY OF A CATERPILLAR	Marrow	1949	$2.95
TIGER, STORY OF A SWALLOWTAIL	Marrow	1953	$3.95
TRUE BOOK OF INSECTS	Children's Press	1954	$2.80
FIRST BOOK OF BUGS	F. Watts	1949	$2.95
WORLD FULL OF HORSES	Doubleday	1950	$3.25
TRUE BOOK OF PETS	Children's Press	1954	$2.50

TIM TADPOLE	Doubleday	1946	$2.25
BUFO: STORY OF A TOAD	Marrow	1954	$3.93

BABY SUSAN'S CHICKEN	Wonder Books	1951	$3.25
THE WONDERFUL EGG	Scribner	1952	$2.95

AND TREES

FIRST BOOK OF TREES	F. Watts	1951	$2.75
THE FLOWER	W. R. Scott	1955	$2.75
TREE FOR MEN	Lippincott	1956	$2.95
BITS THAT GROW BIG	W. R. Scott	1949	$3.95
UP ABOVE AND DOWN BELOW	W. R. Scott	1943	$2.75
WHAT'S INSIDE OF PLANTS	Morrow	1952	$3.93

WAIT FOR THE SUNSHINE	McGraw	1954	$3.25
I LIKE SUMMER	Oxford	1950	$2.50
I LIKE WINTER	Oxford	1952	$2.50
NOW IT'S FALL	Oxford	1948	$2.50
SPRING IS HERE	Oxford	1945	$2.50
DEER IN THE SNOW	Abelard-Schuman	1956	$2.95

WEATHER

Friskey, Margaret	TRUE BOOK OF AIR AROUND US	Children'
Goudey, Alice	GOOD RAIN	Aladdin
Tresselt, Alvin	FOLLOW THE WIND	Lothrop
Tresselt, Alvin	WHITE SNOW? BRIGHT SNOW	Lothrop

TIME CONCEPTS

Schlein, Miriam	IT'S ABOUT TIME	W. R. Sco

THIS AND THAT

Bendick, Jeanne	ALL AROUND YOU	Whittlese
Zim, Herbert	WHAT'S INSIDE OF ANIMALS	Marrow

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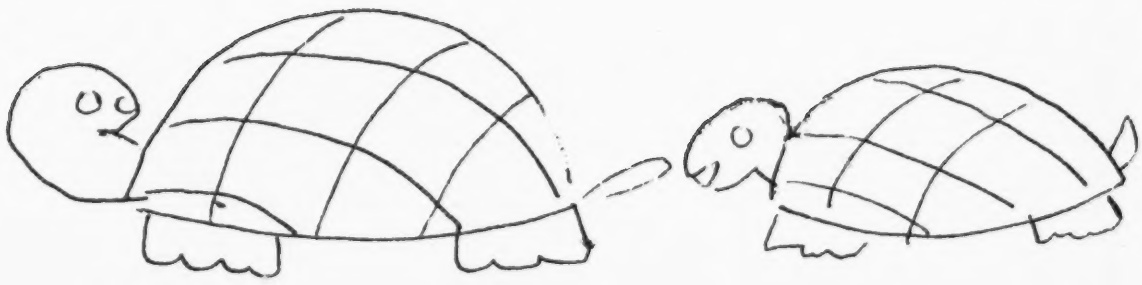
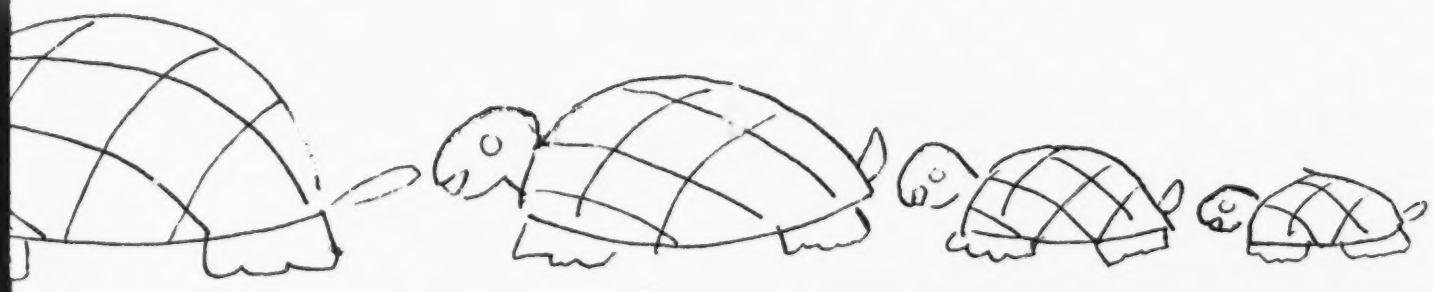


TRUE BOOK OF AIR AROUND US	Children's Press	1953	$2.50
GOOD RAIN	Aladdin	1950	$3.50
FOLLOW THE WIND	Lothrop	1950	$3.75
WHITE SNOW? BRIGHT SNOW	Lothrop	1947	$3.50
IT'S ABOUT TIME	W. R. Scott	1955	$3.25
ALL AROUND YOU	Whittlesey	1951	$3.75
WHAT'S INSIDE OF ANIMALS	Marrow	1953	$3.00

EDUCATION EXTENSION, UNIVERSITY OF CALIFORNIA



In the language-centered curriculum, the most universal language is that of music and bodily movement. Words may come slowly, particularly to the child who is trying to express himself through two separate languages. The creative media can serve as important non-verbal forms of communication. The products of creative activities may pave the way to broader communicative power.

Through the aesthetic media each child can find personal freedom and refreshment. The kindergarten staff utilizes many methods for arranging creative activities depending upon the unique experiences the Indian child brings with him to school.

All of the peoples of the world have their songs. There are songs for play, songs sung in preparation for and during work, and for ceremonies of a seasonal or religious nature. Scholars have traced the movement of song styles along the paths of human migration, and even today one finds that melodies and song themes wander freely within several enormous regions, past language and culture barriers, without losing their essential form. Radio and records have helped to speed up this ready movement of songs and even styles of rhythmic expression.

Within a given group of people, however, the songs and dances which are kept alive and handed on from one generation to another are apt to be an expression of their own personal and shared community concerns. They show a powerful relationship to the aspects of the social structures that regulate the behavior of people in different cultures. As Lomax* summarizes this idea: "As people live, so do they sing." Songs that have lasted deal with the events, ac
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the events, activities, problems and attitudes which are shared by all in the community. The songs are clearly related to the conditions and the organization of social life and of personal experience in it. They are expressive of both the feelings and the forms of the customs and institutions of the culture. Lomax* notes in colorful terms:

> However, when the Pygmies hoot "My Darling Clementine," when the Cherokee Indians chant "Rock of Ages", when the Kentucky mountaineer moans the Negro blues, or when Beethoven sets Scots bagpipe tunes for the symphony orchestra -- when, that is, a tune moves from one style region to another, it is often distorted out of recognition by the new performance framework. (page 65)

The song will have taken on features of style, rhythm, and tonality unique to the tribe or clan.

Whether characteristic of a local group, or borrowed from the universal heritage of songs, made up on the spot for an occasion, or created by an individual to express a feeling or an idea, singing and rhythmic expression should be an easy and ready accompanyment to much that goes on in a school or kindergarten. The teacher working with young Indian children might have the following objectives:

- To keep the children singing, with a group and to themselves.
- To help children reproduce, and to invent rhythms and melodies.
- To help children listen critically to sounds both musical and non-musical.
- To help children find pleasure in musical and rhythmic expression.

*Folk Song Style and Culture. Alan Lomax. American Association for the Advancement of Science. Washington, D. C. Publication No. 88. 1968

To acquaint children with songs of both Indian and non-Indian origin.

She might well keep these same objectives in mind herself. Her interest and spontaneous participation in singing and free body movement can give children assurance that their own activities in music and dancing are prized. It is unfortunate when singing, play with sounds and variation in body movements are regarded as a subject matter to be confined to certain periods of the day. In and out of doors, on trips, as an accompanyment to routines of washing, dressing, and putting things away, a song or a dance can add pleasure to the day and express delight in the presence of others.

In more formal work with melodies and rhythms, the teacher can devise opportunities for children to

match pitch
carry a tune
sing together, in unison
keep time, with voice or body movements
portray mood, temp, and story
understand the concepts of up and down
high and low
fast and slow
loud and soft, etc.
recognize similar and dissimilar melody, rhythm and form
become aware of sounds about us in daily living
make and use simple musical instruments

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1. Folk Son

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move freely or inhibit movement in response to musical cues
imitate the dances and dancers of their own tribes and clans
imitate animals and nature (trees, clouds, wind, thunder, etc.)

Song and rhythm materials to use with young children come from three sources. Most readily used by someone new to Indian lore are those borrowed from another culture, either the treasury of folk songs from all over the world, or the nursery and kindergarten songs in wide use in educational settings. Finally, songs and rhythms may be obtained from the repertoire typically used by the Indians inthe region.

1. Folk Songs

Most of us know a good many folk songs, the kind one sings around a campfire or at gatherings where people feel close and good. It is more fun if someone is present who "knows all the words." As a rule, folk songs have singable melodies and introduce one simple thought or subject theme at a time. They allow for considerable repetitive embellishment, so the singers can keep it going as long as they want by adding and sometimes inventing new phrases. Many folk songs lend themselves readily to singing games, dancing, and rhythmic pantomime. There is action in them, to skip, to clap, dance, jump, stretch, or work to.

Teachers may have reservations about using certain folk songs, those with ungrammatical phrasing or expressions of adult concerns of love, dying and woe. While there is room for argument, and certainly need for sensitivity in selecting those to use, many

educators believe that children can use words which are "too big for them" with relish and growing familiarity, and enjoy the ungrammatical as a playing with words. Perhaps the unhappy content of some songs -- of hurt, pain, killing, death, sadness, cruelty, and destruction -- can help children with their own feelings of loneliness or deep feelings of anger and rejection. Singing about one's own worries and concerns can help in the handling of them. Certainly, the vitality and validity of the songs is a welcome change from the blandness of much music written for young children only.

*Ruth Seeger summarizes her discussion of the appropriateness of using folk songs with young children by asking:

> Should we try to shield the child from feeling of sadness, of hurting, or being hurt, of killing, dying? Can we shield him? Such feelings are not unnatural to him; he has them, to a greater or lesser extent, already within h mself. It is not unnatural for a child to build fantasies around killing, hurting, destroying even things or people he loves. If he can sing about these things -- can take action through song -- the deed is done (in fantasy) and the pressure relieved. Can we not say, then, that having songs around which sing of these things may be a means of easing such feelings within himself, and of helping to make him more comfortable with himself as well as with what is around him? (page 17)

In addition to its use as a carrier of feelings - the entire spectrum of emotions - the folk song is a bearer of history and custom. Since the Indian is growing up in a country to which his people have contributed both to its history and its
comes appropriate to
United States, as we
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tion:

> This music has bee
> play, sleep, fun,
> It has grown out o
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The Young Voyage
The Erie Canal
On Top of Old Sm
Peter Gray

*American Folk Songs
Crawford Seeger. Dou
City, New York. Firs

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its history and its customs and arts, it becomes appropriate to use folk songs of the United States, as well as other countries, with him. Again, Seeger* expresses this function:

> This music has been a natural part of work, play, sleep, fun, ridicule, love, death. It has grown out of and passed through many ways of living and doing. Facts and fantasies cling to it from its wandering. It knows and tells what people have thought about the ways of living and the things that happened. Through it one can grow in initimate appreciation of the railroads it helped build, the cotton it helped pick, the ships it helped sail, the landstretches it made less lonely. (page 21)

No less important are the songs which tell of the herding of cattle, and the animals which were important in the lives of early settlers and Indians, alike.

There are many collections of folk songs, a source to turn to for the words and the extra verses if they are forgotten. Just a few of those which might be used with young children are:

The Young Voyageur
The Erie Canal
On Top of Old Smokey
Peter Gray

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*American Folk Songs for Children by Ruth Crawford Seeger. Doubleday and Co., Garden City, New York. First printed 1948

Turkey in the Straw
Aloutte
Home on the Range
Whoopee Ti-Yi-Yo
She'll Be comin' Round the Mountain

-- The foregoing are contained in Fireside Book of Folk Songs. M. F. Boni and N. Lloyd. Simon and Schuster.

Hold Old Are You? I'll Be Sixteen Come Sunday
What Shall We Do When We All Go Out
Goodbye, Old Paint
Sweet Water Rolling
Rain, Come Wet Me
Rain or Shine
One Cold and Frosty Morning
Riding in the Buggy, Miss Mary Jane
Billy Barlow
Skip To My Lou
This Old Hammer
Hush Little Baby
Jim Crack Corn
Old Mister Rabbit
Bought Me a Cat
Hop Old Squirrel
My Horses Ain't Hungry
Poor Old Crow
Eency Weency Spider

-- these and many others in American Folk Songs for Children. Ruth Crawford Seeger, Doubleday and Co., New York

The Paw Paw Patch
Rattlesnake
Wake Up Jacob
I'm a Leavin' Cheyenne
I'm Goin' Away to Texas
Sweet Betsy

Who! Ha!

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Who! Ha! Buck and Jerry Boy

-- among those found in The Folk Songs of North America. Alan Lomax. Doubleday and Co., New York.

2. Kindergarten Songs

Of course, many of the songs used in nursery schools are folk songs which have been used primarily in the home for generations. Often these are so-called nursery rhymes set to music. Others have been written for use with young children and have proved popular in many countries. Frequently these can be adapted for use with Indian children by simply inserting an Indian word, now and then, or by altering the basic vocabulary of the song so that objects and experiences more familiar to children in rural or reservation settings are employed in the song. The following examples are merely suggestive.

Mary had a little lamb, little lamb, little lamb
Mary had a little lamb
Its fleece was white as snow

Mary ip nay ya kha toohk
ip nay kha toohk
ip nay kha toohk
Mary ip nay ya kha toohk
Mit khoa khat tik toe mik

Mary had a little dog, little dog, little dog
Mary had a little dog
Its fur was white as snow

Mary khip may roo khak toohk
khip mee khak toohk
khip mee khak toohk

Mary khip may roo khak toohk
Mith-khoa-kah ti to mik (Middle Eskimo)

-- Juanita Norton, Kotzebu

The song of Farmer in the Dell can be sung with Eskimo words, or English, in a manner more fitting the environment of these Northern children:

English words	Eskimo words
bear	auk lauk
caribou	tu tu pak
wolf	ah mah ook
rabbit	oo kul likh
muskrat	keek vah look
fish	ah cah lookh
seal	nat chikh
man	E neek
village	Noonah kik
They all clap and sing	Coo yah roongah

Tune of "Farmer in the Dell"

The Auk lauk is in the woods
The Auk lauk is in the woods
Hi, Ho, the Merry, Oh,
The bear is in the woods

The Auk lauk sees the tu tu pak
The Auk lauk sees the tu tu pak
Hi, Ho, the Merry, Oh
The bear sees the caribou

The tu tu pak sees the ah mah ook
The tu tu pak sees the ah mah ook
Hi, Ho, the Merry, Oh,
the caribou sees the wolf

The ah mah ook sees the oo kul likh
The ah mah ook sees the oo kul likh

Hi, Ho, the M
The wolf sees

The oo kul li
The oo kul li
Hi, Ho, the M
The rabbie se

The keek vah
The keek vah
Hi, Ho, the M
The muskrat s

The ah cah lo
The ah cah lo
Hi, Ho, the M
The fish sees

The nat chikh
The nat chikh
Hi, Ho, the M
The seal is c

The E neek go
The E neek go
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They all clap
They all clap
Coo yah roong
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ah mah ook
oo kul likh
keek vah look
ah cah lookh
nat chikh
E neek
Noonah kik
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in the Dell"

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, Oh,
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the tu tu pak
the tu tu pak
Oh
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the ah mah ook
the ah mah ook
Oh,
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s the oo kul likh
s the oo kul likh

Hi, Ho, the Merry, Oh,
The wolf sees the rabbit

The oo kul likh sees the keek vah look
The oo kul likh sees the keek vah look
Hi, Ho, the Merry, Oh
The rabbie sees the muskrat

The keek vah look sees the ah cah lookh
The keek vah look sees the ah cah lookh
Hi, Ho, the Merry, Oh
The muskrat sees the fish

The ah cah lookh sees the nat chikh
The ah cah lookh sees the nat chikh
Hi, Ho, the Merry, Oh,
The fish sees the seal

The nat chikh sees the E neek
The nat chikh sees the E neek
Hi, Ho, the Merry, Oh,
The seal is caught by the hunter

The E neek goes to Noonah kik
The E neek goes to Noonah kik
Hi, Ho, the Merry, Oh,
The hunter brings the seal to the village

They all clap and sing
They all clap and sing
Coo yah roongah coo yah roongah coo yah
roongah
They all clap and sing

Again, the Farmer in the Dell can take on quite a different meaning:

The squirrel in the woods
The squirrel in the woods
Hi, Ho the Merry, Oh
The squirrel in the woods

The squirrel takes a rabbit, etc.

The rabbit takes the deer, etc.

The deer takes a bear, etc.

The bear takes a bird, etc.

The bird takes the beaver, etc.

The beaver takes the wolf, etc.

The wolf takes the fox, etc.

The fox stands alone
The fox stands alone
Hi, ho, the Merry, Oh
They all clap and sing.

-- From Indian Teacher-Aide Handbook,
Caryl Steere and Joseph Steere,
Patricia and Albert Kukulski
Arizona State University, Tempe

3. Indian songs

Strictly speaking, the Indian songs are folk songs, too, but they are discussed separately because they require special preparation. While there are similarities in the songs used by different tribes, and the subjects sung about may be repeated, each group has its own songs which are, in a sense, a summary of the feelings, experiences and preoccupations of the group. These should be checked with the tribe to make certain that they do not include what should be reserved for religious ceremonies. Indian women grinding corn have songs to accompany their movements, a different song for each time of the day. There will be songs for harvest and for preparations before a hunt. Some of the musical heritage of a tribe will be "shy" songs, as Lomax calls them, or part of their secret rituals. These, however, do not differ in construction and style, melody, pitch and rhythm from those in general everyday use.

deer, etc.

r, etc.

d, etc.

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eacher-Aide Handbook,
and Joseph Steere,
Albert Kukulski
University, Tempe

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It is extremely difficult to show correct accents, nasality, and rhythms in the usual musical notations. One of the most explicit attempts to do so was developed by Louis A. Ballard for A Kindergarten Curriculum Guide for Indian Children. After consulting this description of the steps which might follow in working with Navajo materials, the teacher should seek local sources for words and melodies characteristic of her own group. Mr. Ballard stresses the need to pay attention carefully, to forget one's own shyness in attempting to sing with children, and to listen to the music around.

Recordings are becoming more widely available as a source of genuine Indian musical themes and rhythms. A partial listing of sources may be found at the end of this section.

For the most part, North American Indians use percussion instruments only. A wide variety of percussion instruments can be devised to provide the accompanying beat.

MUSIC EDUCATION SYLLABUS

American Indian music is vocal music, and, like all vocal music, it derives from the language of the people. When we realize that over 200 tribes of Indians with separate languages or dialectic variants exist here in continental America alone....Then the enormity and variety of this music can stagger the imagination. Especially so when we further realize that each tribe may possess as many as 500 songs or more, with regional differences to add more complication to the issue.

"How then," you may rightly ask, "can I, as a classroom teacher and a non-Indian, even hope to present Indian music in the class

room...much less SING IT???" Also, "Where does one even begin, if the music is so vast and complicated?" Or, you may say, (and this is a classic statement with teachers!), "I'M NOT A MUSICIAN, AND I CAN'T CARRY A TUNE IN A BUCKET!"

First of all, I suggest that you 'wipe the slate clean' of all excuses, inhibitions and any pre-conceived notions about Indian music and about your own musical abilities. If you can talk, then you can sing. (Of course, I can't say how well...but this is up to you.) You will not be teaching Navajo children to sing Navajo songs, but, rather, you will be leading and learning with Navajo children how to enjoy a musical experience through educational activities such as singing, chanting and rhythmics. These activities will all be based upon the American Indian tribal music heritage and Indian musical expression which was the outgrowth of a cultural need. Your class and you will become a <u>new tribe</u> and, consequently, your new group will have this same need for musical expression which, by all rights, should grow out of the culture represented in your classroom. Fortunately, this culture is very rich and can be very meaningful to you and to your children... BUT, only if a conscious effort is made to utilize that culture and its myriad aspects. You will and must learn a few Indian songs and practice the basic sounds of Indian vocal expression, as presented in the compedium. You must use your auditory faculty in a more acute manner than you have ever before used it...in short, develop your sense of hearing to a very fine degree, and then retain what you hear and reproduce the vocal sound. Just as Navajo language sounds are vastly different from English language sounds, and require reorientation of thought patterns, so does Indian music require a different vocal technique. The

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Does it relate to the ethnic roots of the child? Does it honor the Basic Indianism which this child possesses? Does it provide ample opportunity for the child to apply his culturally aesthetic sensitivity? Does it open the door toward a brother perspective of music, language and the entire world of learning experiences? IS IT FUN?

Such questions as these can serve as guidelines throughout this discovery of Indian musical elements by you and your children, and they can serve as guides in the application to your teaching. Remember, to the tribal Indian person, music is not an isolated experience as it is in our Western Civilization where we dress ever-so-properly to attend a concert or a jam session. Indian music, besides being vocal-plus-percussion, was and is mainly functional music. Gebrauchsmusik, as Paul Hindemith, the famous German composer, would say. The function may be to appeal for rain to help the corn grow, or to accompany the dance or to help cure the sick or many other functions. Now, your classroom music and songs cannot all be functional in this sense, obviously... but, this cultural need can be used to make each activity more meaningful. Some Indian songs related war experiences of the singer or gave tribute and recognition to the leaders. Perhaps you never thought of it as such, but that little song that you yourself used to sing in kindergarten or first-grade was based upon the same idea...remember? "GOOD MORNING, TEACHER. MY NAME IS LORENZO!" or "GOOD MORNING, MRS. SMITH. MY NAME IS BETTY!"

Well, such greeting songs which use courtesy words are still used as a beginning song

activity in every music class in America. However, most American children hear 'good morning' every day at home and on the streets. Your Navajo children do not. Furthermore, the very words 'good morning' are completely alien and un-thinkable to your Navajo child.. in fact, to say this and look right in a person's eyes is downright impolite, according to the Navajo 'way' of life. At least, this has been my experience with teachers and administrators who have worked with Navajo children for many years.

So, what do you use instead of 'good morning'? What would relate to the Navajo culture? Well, why not try as a first musical experience, the chanting of a typical Navajo vocable (no-meaning sounds) and then add a child's name.

EXAMPLE 1. A YEH YANGA, A YEH YANGA...A YEH YANGA, A YEH YANGA, LORENZO, ANGA

Note: First, pick a comfortable pitch for the base tone. Then say A, as in fate, prolonging the sound. Then, intone or chant the syllables to a rhythmic beat, walking speed, saying each syllable rather short and curt. YANGA, sounds like kong-ah, only substitute the "Y" consonant sound. There will be a little dip on the second YANGA. Listen for this; try to imitate.

Do this to the accompanyment of an Indian drum and rattles, as follows:

EXAMPLE 2. A YEH YANGA, A YEH YANGA...A YEH YANGA, A YAH YANGA, LO-REN-ZO, ANGA.

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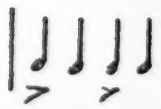

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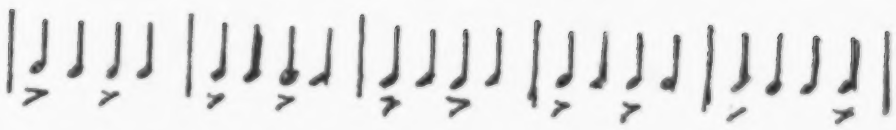

Meaningful activity which is related to the culture of the Indian child can be the key which opens your own understanding as well as becoming a springboard for other educational experiences. Hence, the basic objectives and philosophy of this treatise requires that three distinct Indian music learning experiences be utilized:

1. Navajo tribal songs and rhythms.
2. Pan-Indian tribal songs and rhythms. (other tribes)
3. Creative song-play-mime activities with rhythms. (using English words as well as Indian words and vocables.)

With this beginning, it is a short step to all-English songs or even the little French, Latin, German songs which children sing.

Also, included herein are helpful suggestions for your own vocalization of Indian songs. In learning these, the "mother tongue" method is by-far superior to any reliance upon written notation or text, although some brief suggestions for these are included. You should approach this problem as a child does who learns some of the most difficult languages in the world before he reaches 6 years of age. The Indian or the Senega youngster learns his complex language and its many subtle nuances by acute listening and by repetition. This is the "mother

tongue" method. Also, I encourage you to venture forth on your own...for additional songs and words, inquire of the Indian people, and repeat all words and all sounds...allow yourself to be laughed at and join in the fun of making a mistake and correcting it. The Indian language has many similarities within itself, so many, in fact, that the Indian people love puns on words and love to laugh at each other. For instance, one worn joke arises from the fact that hoseesnta* means equally "I will sing" or "I will kick him." And so there are many anecdotes of the pattern:

> [1]"Hosteen Yazzie (little man) went to see his mother."
>
> "What for?"
>
> "He is going to give him a kick." (i.e., The man, a singer, will perform a chant.) (Also, there is no gender in the Indian language.)

Learners [2]may take comfort against their mistakes and embarrassment from the realization that the only recipe for pronouncing an Indian perfectly is to take the precaution of being born of or among Indians. The talk of those who have learned the Indian languages as adults always has a flabby quality to the Indian ear. They neglect a slight hesitation a fraction of a second before uttering the stem of the word. They move their lips and mouths too vigorously. Native Indians have a nonchalant, mechanical flavor in ordinary discourses--almost as if a robot were talking.

True, you are dealing with two languages, English and the Indian language, but the one language which is universal is MUSIC. And music is a living, exciting language which

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[1]THE NAVAJO by
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[2]IBID, p. 258

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transcends a need for words and actual meaning. Especially so in Indian music where many no-meaning sounds are used. So---be of good faith in this adventure in sound, and, remember...to your students the sound of your voice can be the most beautiful music to their ears. Listen well, and:

GOOD SINGING = NUH ZHONI TA'L* (produced by stopping the flow of air by closure of the glottis.)

MATERIALS NEEDED FOR USE IN THE CLASSROOM

2 small Indian Tom-Tom Drums with beaters (available at any curio store)

6 or more Indian gourd rattles (or maracas will do). If these are not readily available, then your class can make some from tin cans and gravel, painted and tied to a stick!

A variety of sticks, 12" x 1" diameter, enough in pairs for each child to have one pair.

A variety of stones, fist-size (your student's fist, not yours), again enough for each child to have one.

Some branches of a tree (cedar is readily available, or mesquite), just about 5 or 6 will do. This can be messy.

---

[1] THE NAVAJO by Kluckhohn & Leighton, Doubleday and Co., 1946, p. 260

[2] IBID, p. 258

Sand in a tin can or pop bottle to make a swishing sound. This makes a good rattle that everyone will want to use.

(Then for yourself, a tape recorder to play back your tapes of Indian music which you are learning.)

NOTE: NO PIANO NECESSARY
NO RECORD PLAYER NECESSARY

With materials, it is possible to be a bit innovative in producing some of your own percussion instruments from the raw materials available. Shoe boxes, rubber bands, pop bottle lids on a string...These and other things can provide you with percussion sounds to accompany the voice. However, it is best to use authentic Indian musical instruments when possible. The Navajo people have a little drum made of pottery, filled with water and covered with tanned sheep-skin. This is a delightful little instrument and perhaps one of your parents can help you. Again, this can be fabricated from a coffee can and an inner-tube, but the original version is unbeatable!

TYPICAL INDIAN VOCABLES:

Example 2. WHEY NEY YAH (Navajo) (Low voice register)

WHEY NEY YAH (high) eh OH-oh, OH-oh, OH-OH, OH-oh, OH-oh, OH (seven beats, the voice getting lower each time.)

This particular vocable is used as the chorus part to a Navajo Love Song, yet it is fun to sing by itself, as it has strong rhythmic and lyrical features alone, without the use or words.

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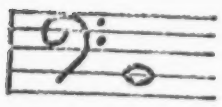
NOTE: What tone do you start on??? The beauty of Indian singing is that you can select a comfortable pitch level that is not too high or too low for your own voice, and use that as a base tone. For instance this is a good starting pitch:



B - natural, bass clef, for men.

B - natural, below middle C, for women

Where the vocable jumps up (high), the voice skips an octave, by musical terminology. But this is not important to learn right now. The best thing to do is imitate the sound.

For a rhythm or percussion sound, clap your hands, or use a rattle or beat a drum.

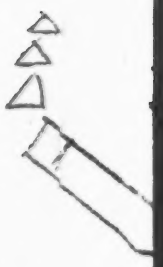
EXAMPLE 3. HEY EH, HEY EH, HOH OH HOH
HEY EH, HEY EH, HOH OH HOH, HOH OH HOH,
HOH OH HOH, ETC.

This particular vocable is commonly used in the ceremonial Yei-be-chai songs. By itself it has no sacred meaning and can be used in the classroom for our singing purposes. Again, select a comfortable pitch level and start the chant with a steady rhythm and use a nasal tonal quality by keeping the back of the tongue high against the palate of the mouth.

This would be an excellent vocable to use with dance steps similar to the ceremonial dances. Stepping with the left foot forward, dragging the right foot behind in a shuffling fashion.

A CREEK INDIAN SONG: "Duck Dance Song" From this Oklahoma Indian tribe of woodland Indians, who hunted wild ducks for food, and created this little song as a social dance activity. No words, as such, only vocables.

Example 6.



WAY.....HEY YAH, WAY, HEY, YAH HEY...YAH
WAY HEY YAH WAY HEY WAH HEY YAH.
OH HO YANNA HEY YAH
WAY HEY YAH HEY YAH.
(repeat)

After singing this song several times, the leader (you) should end it with a drum tremolo (roll), and sing the words in a high pitch, "WE HOOOOOOOOO".

Related activities to the Duck Dance Song could be having the children waddle across the floor like ducks.

-- Louis Ballard
Education Specialist, Music, BIA

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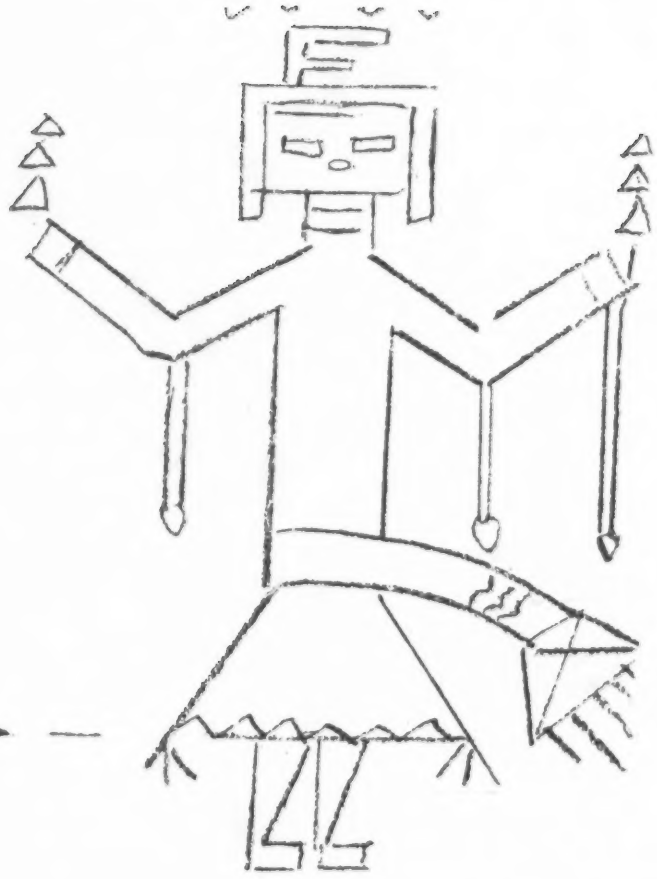

RHYTHMIC MOVEMENT AS A TOOL FOR

Young children learn through their senses. The kinesthetic sense (muscles) is as important for them as their other senses of sight, hearing, taste and touch. Rhythm, and especially rhythmic movement, is a valuable experience to plan as part of the curriculum. If it is related to the child's life experience it is not only pleasurable but also makes possible:

- The expression of his understanding of his world
- The extension of his knowledge of his environment
- The understanding of the roles of himself and others in his society
- The non-verbal expression of his feelings and ideas.
- The learning of new concepts

<u>Varieties of Experiences</u>

1) Indian children during dramatic play like to beat drum rhythms and sing and dance in the traditional patterns of their culture. They do this without having any specific lessons but rather in the same way that they imitate other movement activities they have observed in their homes and tribal environment. If there is no sign of this in your classroom then an invitation to a grandparent or tribal leader to sing or play the drum for the children will surely get them to begin. The teacher's attitude of respect and admiration will indicate that she values the experience and it will appear more often.

To encourage this further, classroom equipment should include records of authentic Indian music, at least one good Indian drum, some rattles and ankle bells and pieces of

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appropriate fabric for simple costumes. (These should be checked with the tribal council to make certain they do not include what should be reserved for religious ceremonies.) All these can be set out on a special shelf or center-of-interest area so that they are readily available to the children. (See Equipment Guide) Colorful pictures of costumed dancers in action can be placed nearby for inspiration.

The teacher's role is to provide the equipment, the space for movement, the time in the daily program and the encouragement for the children to become involved. She is not actively teaching "how" to sing and dance the specific steps unless she is especially knowledgeable. Her role here is more that of an "enabler", one who makes it possible for the child's expressiveness to occur.

There are other kinds of rhythmic movement activities in which the teacher plays a more active role but still does not demonstrate a "right" way for the children to try to imitate. These are:

2) Circle Singing Games. This is an activity in which the teacher participates together with a small or large group. She directs the sequence of the movement (what is to happen next) but not the specific way it is to be done. That should be left to the individual child. For example, in the game "Here We Go Round the Mulberry Bush" the motions of each participant can be quite varied while demonstrating "this is the way we put on our clothes." Encourage the children to help you adapt the verses of such singing games so that they relate more appropriately to their own life experiences. (See

examples in Games). This will provide an opportunity for stimulating thinking, language use, and encourage new varieties of rhythmic movement. Once you have made up a new verse write it down so that it can be remembered and repeated. Children enjoy the ritual of repetition as well as variety.

Note: Indian children are generally not competitive any may not volunteer for turns. They like to be recognized for their individuality but not in front of a group. In games that call for one person to be in the middle you can overcome possible embarassment at being "singled out" by having two or three at a time instead.

3) <u>Movement Experiences for Body Awareness</u>.

Freely exploring and then identifying ways that different parts of the body can move are opportunities for self-awareness, self-control and also for language development. For example, the teacher might suggest the following: "Let's walk around the room." (with or without rhythmic accompanyment.) "Let's find another way to walk that's different." (stamping, tiptoe, on heels, on outer edge of foot, sideways, backwards, big steps, little steps, etc.) "When we walk, what part of us has to move?" "Is there another part of us that can move even when we sit down? Find a way to move while you're sitting." (All can explore at the same time.)

"What's moving?" (Some children will demonstrate non-verbally while the teacher can identify the part of the body. She might add a description of the kind of motion it is, i. e., hands shaking, arms swinging, body rocking, head rolling, etc.)

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Sometimes ask the whole group to try out discoveries made by some of the children. Choose a sequence that can point up differences in tempo (fast contrasted with slow.) Chant the descriptive words to provide a simple rhythmic accompanyment. For example,

"Arms/can swing/ ver-y/slow-ly/
Arms/canswing/ from side/to side/"
"Hands/can shake so/very/quickly
Hands/can shake so/very/fast/"

The emphasis in this kind of experience is the discovery that children can control their own body movements, vary them and repeat them in rhythmic ways that feel good and help them to learn. Individual differences can be admired as creative attempts to respond to the challenge offered by the teacher rather than in judgmental terms of right or wrong. The teacher should be careful not to laugh at a child's unpredictable response for this is a way to reinforce inhibition.

4) Movement Experiences for Concept Learning.

There are numerous concepts that can be experienced more clearly through movement than any other way. Some of these are:

Concepts of size; big, little; tall, short; narrow, wide; long, short.

Concepts of shape and form; round, square, flat, bumpy, smooth, straight, twisted, curved.

In these, the children can work together with partners or in small groups to try to form their own bodies in these different sizes and shapes.

Concepts of position in space: under, on top of, above, behind, in front of, between, in the middle.

Concepts of direction: backwards, sideways, ahead, up, down, right, left, near, far.

A game adopted from the traditional "Musical Chairs" can be played (in which no one is ever "out"). Each time the music plays the children move around the line of chairs (which should be widely spaced) in a direction called out by the leader, i.e. "backwards". When the music stops they must stop according to the leader's call, i.e. "between the chairs".

Concepts of speed: fast, slow, medium (called "tempo" in rhythm).

Changing gradually or suddenly from one tempo to another enables children to organize some of their original movement rhythms so that they are in a continuous sequence and result in the form of a dance. The contrast of a fast movement followed by a very slow one and ending fast again is an example of form in dance.

Concepts of weight and intensity: heavy, light, hard, soft; strong, weak; loose, tight; tense, relaxed.

These can be experienced best while working with props like big balloons, rubber balls, paper streamers, little feathers, big blocks, soft silky scarves. After the children have had an opportunity to explore these for awhile, play appropriate recorded music to evoke dance-like movement with them.

Concepts of number, color and category are useful as possible ways to organize the class for turns during movement activities, i.e., "all people who are wearing brown socks go in the middle of the circle. How many are there?" The finger play "Where is Thumbkin?" can be

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dramatized in movement by having five people stand in a row, each representing one of the characters (Thumbkin, Pointer, Tall man, Ring man, Pinky). Each "runs away" after he has answered, "Here I am." and "Very well, I thank you."

5) Other Rhythmic Movement Experiences usually referred to as <u>Fundamental Rhythms</u> and <u>Locomotor</u> Rhythms: These include jumping, skipping, crawling, rolling, running, walking, sliding. <u>Dramatic Rhythms</u> are those in which some of these are done while pretending to be an animal or a special character: tumbling like a clown, hammering like a workman, steering like a truckdriver or engineer, swimming like a fish, flying like a bird, hopping like a frog, galloping like a horse.

In any of the above activities, the teacher can use her voice in chant or song spontaneously improvised or use a drum to give rhythmic support to the movement. To do so most successfully, she need not be a trained musician but she must try to identify the tempo, the beat and the quality of the intensity of the particular rhythm she is going to accompany. That is, she must adjust herself to the speed and to the lightness or heaviness of the child in movement. It will be done most easily if she is able to join in the movement herself, imitating the child. She can then "know" it in her own muscles with her kinesthetic sense.

-- Miriam B. Stecher

INDIAN SONGS
from
Songs of the Wigwam,
Cooperative Service Inc.
Delaware, Ohio. 1955.

Magic Feathers
Paddling My Canoe
Woodpecker Song
Fox Hunter's Song
Maple Sugar Song
Ottawa Canoe Song
Hoot Owl Song

Copyrighted Material Deleted

FINGER PLAYS

Five little Indians on a sunny summer day
Rode out on the reservation
Just wanting to play

The first little Indian
Found a pretty stone
"I think I'll pick it up
and take it to my home."

The second little Indian
Caught a small field mouse
"I'd like to keep it for a pet
And build for it a house."

The third little Indian said
"I know this prickly weed.
See, when I open it,
there's a tiny seed."

The fourth little Indian said,
"On this hill there is a place
When I stand there
I feel the wind blow in my face."

The fifth little Indian said,
"It is fun here in the sun
I'd like to take off my shoes
And run and run and run."

So the five little Indians
Stayed and played all day
Then they jumped upon their ponies
And galloped far away.

Five little Indians went hunting on the plain
The first one said, "I think it's going to rain."
The second one said, "There is thunder in the air."
The third one said, "I don't care."
The fourth one said, "Let's gallop far away."

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I don't care."
"Let's gallop far away."

The fifth one said, "We can hunt another day."

"Clap" went the thunder
Down came the rain
And the five little Indians
Rode home over the plain.

EXPERIMENTING WITH SOUND

Making Percussion Instruments With Various Materials

Drums

Materials:

1. Bowls - wooden chopping; drill hole in bottom, stretch soaked drum head, tack with upholstery tacks.
2. Kegs - all sizes; sand thoroughly, paint, bore 3 holes in bottom, remove top metal rim.
3. Wooden Pails
4. Tin Cans - #10 size - coffee cans - use plastic lids for drum head.

Drum heads: Used drum heads - soak in cold water 10-30 minutes according to weight of skin. Fasten to drum with upholstery tacks, pull tightly all around. Can use thongs made of rawhide or plastic string. Do not touch for 24 hours.

Caution: Thin drum heads cannot be laced as holes weaken skins.

Beaters for Drums

1. Sponge Ball - cement to dowel stick.
2. Stocking Darner - bind with yarn and cover with strong material.
3. Large Spool - bind with yarn and cover with strong material.

4. Dish Mop - tie strings, bind with yarn and cover with chamois or piece of glove.
5. Sock - fill with soft material and cement to dowel.

Rhythm Sticks

8" long - sand, paint (hang with string and nail on end while painting)

Sand Blocks

Blocks of wood, mill ends - sandpaper, cover blocks on bottom and four sides with sandpaper, level all four corners to avoid tearing. Fasten cupboard handle on small block of wood to fit child's grasp.

Rattles and Tambourines

1. Gourds - bore holes top and bottom, clean out seeds and fill with handful of dry corn, dried watermelon seeds, tacks, BB shots, according to sound desired. Seal holes with plastic wood.
2. Coffee Can Lids - put in noise maker as above, fasten two lids together with tape, decorate, good substitute for tambourines.

Sound Boxes

1. Cartons - cottage cheese, ice cream, yogurt.
2. Boxes - plastic, heavy cardboard, wooden.

Place in each materials giving different sounds: macaroni, a paper clip, rice, pepper corns, pebbles, small shells, sand, tiny bells, small nails, etc.

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Seal boxes, and cartons so young child cannot empty contents. Choose some boxes small enough to fit comfortably into a young child's hand.

Ringing Sounds

1. Bells
2. Teacups of different sizes suspended on strings.
3. Glasses of different sizes filled with different amounts of water.
4. Nails of different lengths suspended on strings.
5. Pieces of metal pipe of various lengths - bore hole in side of pipe, suspend on strings.
6. Pieces of metal - different sizes.

MUSIC BOOKS TO CONSULT

Buttree-Seton, Julia M. Rhythm of the Red Man in Song, Dance and Decoration. A. S. Barnes and Co.

Hofmann, Charles American Indians Sing. New York, John Day. 1967

Kurath, Gertrude P. Iroquois Music and Dance. Washington, D.C.: Government Printing Office, 1964 (BAE Bulletin 187)

Mason, Bernard S. Dances and Stories of the American Indian. A. S. Barnes. 1944

Seeger, R. C. American Folk Songs for Children. Doubleday.

Seeger, R. C. Animal Folk Songs for Children. Doubleday.

Underhill, Ruth. Pueblo Crafts. U. S. Dept. of Interior. 1944. Contains a chapter on the construction of musical instruments.

Bahti, Tom. Southwestern Indian Tribes. Flagstaff: K. C. Publishers. 1968.

Baldwin, Gordon C. Games of the American Indian. New York: Norton. 1969

RECORDS, INDIAN AND OTHER

Authentic Indian recordings may be obtained from:

Canyon Records
6050 North Third Street
Phoenix, Arizona 85012

Among them: Dances and songs from the Apache Kiowa, Omaha, Papago, Pima, Peyote, Navajo, Arapahoe, Arikara, Cheyenne, Hopi, Jemez, Shawnees, Sioux, Toas, Ute, Zuni.

Indian House
Box 472
Toas, New Mexico 87571

Among them: Commanche Peyote Songs. Vol. 1 1F 2401; Round Dances of Toas Pueble, Vol. 1. 1H 1001; Navajo Skip Dance and Two Step Songs 1H 1503; Navajo Sway Songs. 1H 1501; War Dance Songs of the Ponca, Vol. 1. 1H 2001.

Northern Cheyenne Arts and Crafts Asso.
Lame Deer
Montana 59043

Peabody Museum of Harvard University
Cambridge, Massachusetts 02100

An album of 5 records of Navajo Creation Chants.

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of 5 records of Navajo Creation

Tom Tom Records
Box 1493
Albuquerque, New Mexico 87100

American Indian Sound Chief
c'o Oneida Methodist Mission
RFD 2
West DePere, Wisconsin 54178

Folkways Records and Service Corp.
117 West 46th Street
New York, New York 10000

Among them:
- Rhythm and Game Songs, FC 7057
- Songs to Grow On, FC 7005
- American Game and Activity Songs for Children, FC 7002
- Music Time With Charity Bailey, FC 7307
- Counting Games and Rhythms, FC 7056
- Activity Songs for Kids, FC 7023
- You'll Sing a Song and I'll Sing a Song, FC 7664
- American Folk Songs, FC 7601

Dimensions 5
Box 185
Bronx, N. Y.

Among them: Dance Sing and Listen, D 101
Dance Sing and Listen Again D111

Recording Library, Music Division
Library of Congress
Washington, D. C. 20540

Institute of American Indian Arts
Cerillos Road
Santa Fe, New Mexico 87501

Album of records on Hopi, Navajo, Plains, etc. Indian chants recorded by the E-YAH-PAH-HAH Indian Chanters.

The skill and creativity of the American Indian in craftsmanship is well known, almost synonymous with being Indian. Over the years, the tribes have specialized in work with molding clay; weaving or plaiting wool, grasses and reeds; carving in wood, stone or bone; and in leather and beadcraft. Indians have done fine painting with sand, etched remarkable pictures on stone walls, and decorated their everyday objects with a range of colors, bright and subtle. More recently, Indians of the Southwest have begun to use silver with coral, shell or turquoise to make the exquisite jewelry so widely appreciated today.

As materials and styles of life have changed, so have the products of the different tribes. The kindergarten teachers can get many good ideas from looking at exhibits and attending fairs, by observing objects in use daily, and by studying the many beautifully illustrated publications available today.

In their approach to art, the teachers of Indian children may do well to remember that many of them have had training and experience at home which has increased their muscular coordination. While it is not always the case, teachers have sometimes noticed that 5 year old children understand how to manipulate modeling materials, and show other evidences of skilled fine muscle coordination. In some cases, teachers have not provided materials and opportunities which are sufficiently advanced for their pupils.

Many of the materials a teacher will want to provide are not "art" materials in the strict aesthetic sense. Hammers and nails, for example are not ordinarily regarded in the fine arts category. The child's use of them, how-

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ever, may be artistic if he is given an opportunity to explore their possibilities and encouraged to use them to express his ideas and feelings. The use of the natural environment and tribal experiences are an important source of self-identification and creative personal expression.

The approach to art with a young Indian child will rest on the objectives of:

Insuring that he see that the products of his people are valued.

Allowing him opportunity to express intuitive design, to experiment with color, line, texture, design and material.

Creating an awareness of the principles of design in nature: balance, rhythm and movement, cyclical and seasonal changes.

Providing knowledge about the care of equipment and materials.

Noting similarities and differences in size, shape, color and texture.

These objectives can be fulfilled in a setting where a wide variety of materials are available, and where the child's interest in them is encouraged. The teacher will have to take the initiative in the first two and the last objective above, and respond sensitively to the cues of the child in the others. A few skills and techniques can be given to the child as he finds the need for them:

How to control the movement of the brush for example, and how to change direction.

How to keep the colors clear, and the paint from flowing too freely.

The results of pressure, nailing, fastening.

The techniques of shaping, cutting, tearing and weaving, printing, stitching, building, etc.

The skills of using plastic materials, in twisting, pulling, squeezing, rolling, flattening.

In none of the objectives, nor the techniques listed is the need for a finished product implied. The experience itself is the important thing -- the use of materials, the processes, and the conceptualizations...Art experiences will be related to many other elements in the curriculum. Concepts of size, shape and number will carry meaning for mathematics and reading; the products he creates may be the outcome of field trips and of new understandings in social studies; puppets may encourage the use of language, and so on. They are embedded in the entire program, feeding into other areas and flowing out of them as well.

Most good kindergarten textbooks carry a wealth of suggestions for use of creative media. In the following pages, suggestions will center on those which may have special value in schools for Indian children.

Clay: If local deposits of clay are available, be sure to use this source as well as commercial varieties. It may be wise to check with local tribal people about its use. Underhill* suggests that in older times, a potter would speak to the earth, asking permission to take the clay and sometimes leaving an offering, "for pueblo people feel that clay
and plants, ha
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feel that clay and rocks, like animals and plants, have their own feelings, and that man must live on kindly terms with them." (page 79)

Most Indian potters build pottery with the coil method which is an easy technique for children to learn. Designs can be scratched on, or painted. The dried product can be carefully polished with a stone, perhaps too time consuming a task for a child except for a burnished area or two.

The clay should be kept moist. Indian women bury it in the earth sometimes.

Other plastic modeling materials can be used as well. Plasticine, play-dough made of flour, salt and water, paper mache, sawdust mixed with a blender and others.

Paints: Commercial tempera and an assortment of brushes should be available. With some instruction, the children can learn to mix their own colors. It can be fun to learn about the local dyes, using native plant materials. The plants used will vary from one section of the country to another.

In the Southwest, for example, various subtle shades are obtained with prickly pear cactus, yucca, ground cherry, sumac, scarlet bugler, sage brush, grease wood, ground daisy, fresh dock leave, woodbetony, and oak root bark. Also used by the Southwest Indians are the Rocky Mountain bee plant, sunflower seeds for black, navy bean or larkspur for blue, red corn or pigweed for light red, and rabbit brush for yellow.

Different clays and minerals are used for the mordant to fix the dye when it is being used for cloth. It is worth seeking the wisdom of those skilled in dyeing in the community, and consulting such works as Underhill* and Whiting**. Davidson*** gives instructions for use of such commonly available dye sources as the tomato (for yellow), brown-eyed Susans (for green), and pokeberries for red.

Collage: Even the sky may not be the limit when it comes to finding interesting items for children to use in arrangements on paper, cardboard, or pieces of wood. The items can be adhered with paste, shellac, varnish, or you might want to experiment with native adherents such as pinyon gum.

Use: crepe paper and construction paper, shredded, torn, or cut.
all kinds of seeds, pumpkin, melon, etc.
juniper berries, bits of pine cones, evergreen twigs, alder and birch catkins
feathers, trimmings, yarn, ribbon, felt, fur
dried flowers, weed seed heads, corn, wheat, other grains
string, cord, twine, raffia leather
cloth, cork, raw cotton
sequins, beads, bits of metal or plastic
shells, pebbles, mica shavings
dried seaweed, bits of driftwood and so on

Woodwork: Keep your eyes open to collect materials which can be used to build fairly substantial pieces of equipment for transportation: sleds, wagons, boats, airplanes.

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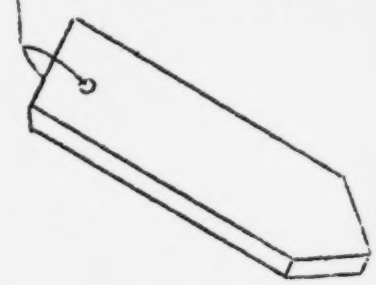

Sewing: Among
pets can be m
or robes to a
er mache. Go
puppet heads

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*Underhill, Rut
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from Unicorn
645. 20851.

minerals are used for
the dye when it is be-
It is worth seeking
skilled in dyeing in
consulting such works
hiting**. Davidson***
for use of such commonly
es as the tomato (for
Susans (for green), and
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y may not be the limit
nding interesting items
in arrangements on pap-
ieces of wood. The items
paste, shellac, varnish,
o experiment with native
inyon gum.

nd construction paper,
r cut.
s, pumpkin, melon, etc.
bits of pine cones,
, alder and birch cat-

gs, yarn, ribbon, felt,

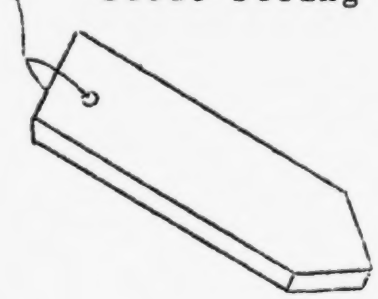
ed seed heads, corn,
ains
ne, raffia leather
cotton
its of metal or plastic
mica shavings
ts of driftwood and so

eyes open to collect
be used to build fairly
of equipment for trans-
agons, boats, airplanes.

e, boys can make toma-
flat stone to a sturdy

wooden handle made of dowel or tree branch. It may be painted or decorated with trimmings of leather, fur, evergreen, and the like.

Boys in the Southwest may know about the Bull Roarer. This is a strip of wood, about 8 inches long, one inch wide, and 3/8 to 1/4 inch thick. Pierce one end to insert a stout string or cord, about 36 inches long. Make a pointed end opposite the string insertion. When whirled over head, it makes a fine buzzing sound, or "bull roar." Used to tease or "frighten" others. It is usually painted in bright colors.



Sewing: Among other sewing projects, puppets can be made by sewing simple skirts or robes to a head of clay, wood, or paper mache. Gourds also lend themselves to puppet heads.

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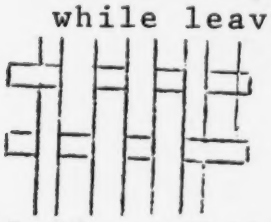
*Underhill, Ruth. Pueblo Crafts. Bureau of Indian Affairs, U.S. Dept. of Interior, Washington, D. C. Can be ordered from the Haskell Institute, Lawrence, Kansas

**Whiting, Alfred F. Ethnobotany of the Hopi. Museum of Northern Arizona, Flagstaff: Northland Press. 1966.

***Davidson, M.F. The Dye Pot. Available from Unicorn, Rockville, Maryland, Box 645. 20851. 1967

Weaving: The skill of passing one set of fibers through another fixed set of fibers,-- weaving-- is not beyond the understanding of some young children. The simplest weaving can be done with paper stribs, fairly stiff, passed through slits in another sheet of paper in which openings are cut while leaving the edges intact. Simple looms can be purchased. A variety of fabrics can be used for warp; yarn, yucca strips, bark, felt, cotton, cloth and so on.



Dolls: Children can make simple dolls of cornhusks, tied tightly with strong cord.
Or use apples, dried, fixed to a strong stick or dowel and dressed in leaves or cloth.
Hollyhocks make a perishable doll. Stand them on toothpicks to make a doll with a ballet dress.
Clothespins (the straight, wooden type). Paint a face
Clay
Socks, stuffed with anything, tied and painted. Faces can be sewed with bits of felt, buttons, or other fabrics.

Masks: These are in the tradition of many Indian tribes. One should be aware that in some cultures particular masks have a religious significance. Children can make masks of paper bags, fitting the entire bag over the head as in the style of a Hopi Kachina Doll.

Masks of a paper or fabric can be painted, trimmed with construction paper, feathers, cotton cloth, yarn, flowers or leaves, evergreen needles, and almost anything you can think of.

Necklaces: Using string, yarn or a leather

thong,
bolo tie
of woo
bracelet
short

Seeds,
can be
strung

Kites:
paper,
or of
person

Other
Ideas:
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Finger
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1. Soap
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lar masks have a reli-
Children can make masks
g the entire bag over
yle of a Hopi Kachina

abric can be painted,
ion paper, feathers,
lowers or leaves,
almost anything you

, yarn or a leather

thong, as a base, articles for
bolo ties; personal decoration can be made
of wooden or glass beads, yarn,
bracelets; corn andberries threaded with a
short blunt needle.

Seeds, sequins, shells and other trimmings
can be glued to clay or wooden bases to be
strung onto a cord and used as a pendant.

Kites: Can be made in different styles with
paper, reinforced with thin wooden lathes,
or of plastic or fabric. Get a skilled
person to help.

Other Painted stones.
Ideas: Puzzles made of pictures glued to
cardboard or plywood and cut apart.
Finger puppets of clay, old gloves,
stretch cloth.
Sand of different colors can be used to
make sand paintings.
Spread glue on a stiff cardboard or
piece of plywood.
Sprinkle sand over the glue. When dry,
shake off excess.
Use one color at a time. When all is
dry, spray with a clear lacquer to fix.

HINTS FOR USING CREATIVE MATERIALS WITH CHILDREN

1. Soap flakes added to tempera paint makes the paint easily washed from hands and clothing.

2. Liquid soap added to tempera paint prevents the paint from chipping and peeling when used on surfaces such as glass or metal.

3. If your table tops are not formica, cover tables with oil cloth for finger-

painting or clay work.

4. For a fixative to use on pictures made of colored chalk, use hair spray or a commercial fixative designed for that purpose.

5. If you have no brushes, substitute sticks, twigs, branches from bushes, plants, stones, cornhusks, etc. all found in natural environment.

6. Save shoe boxes so that scrap materials can be separated and put into boxes labeled (with pictures or words) buttons, paper, cloth, wire, beads, etc. This makes easier access when the children are looking for specific materials for collages.

7. Allow the children to use the collage materials to embellish their modeling with clay or dough.

8. Large flat trays or baking sheets may be used for finger painting--the children can put them on the floor if you have limited table space.

9. Use the rolls of plastic-coated shelf paper for finger paint paper --less expensive than regular finger paint paper.

RECIPES FOR CREATIVE MATERIALS

Finger Paint (uncooked)

2 cups of cold water
1 cup wheat paste flour (paper hangers' flour may be purchased in hardware or paint store)
coloring (vegetable colors or tempera paint)

Add flour gradually to water. Stir with

spoon, or
thick, cre

Finger Pa

blend 1 -
with 1 cu
add to 6
bring to
add 1 cup
beat to b
add veget

(If this
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peppermin

Children
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Easel Pai

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3 tablesp
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table can
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milk cart

Children
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3/4" wide

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bushes, plants,
c. all found in nat-

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put into boxes lab-
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eads, etc. This
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use the collage ma-
their modeling with

aking sheets may be
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if you have limited

tic-coated shelf pa-
paper --less expen-
ger paint paper.

VE MATERIALS

paper hangers' flour
dware or paint store)
s or tempera paint)

ter. Stir with

spoon, or beat with egg beater. Should be thick, creamy consistency.

<u>Finger Paint</u> (cooked)

blend 1 - 1/4 cups starch
with 1 cup cold water
add to 6 cups boiling water
bring to boiling point, remove from stove
add 1 cup soap flakes (rounded)
beat to blend
add vegetable coloring

(If this mixture is to be kept in closed jars, add a few drops of oil of cloves or peppermint to prevent spoiling.)

Children may paint on kitchen table top, oil-cloth surface, cookie sheets, large metal, plastic or aluminum trays, or large sheets 15 1/2" x 20 1/2" glazed paper, or shelfing paper cut to 15 1/2" x 20 1/2".

<u>Easel Paints</u>

1/2 cup water (warm)
3 tablespoons colored powdered paint or tempera paint.

(may be thickened with small amount of wheat paste. A few drops of oil of cloves or peppermint will keep black paint from spoiling.)

Paint may be placed in small juice or vegetable cans. To prevent spilling, cans may be placed in wooden cheese box, open quart milk carton, or tray with sides.

Children should have newsprint paper 18" x 24", long handled flat brushes 1/2" and 3/4" wide. One brush for each can of paint.

Dough (uncooked)

for each child:

2 cups flour
1/2 cup salt
1/2 cup to 3/4 cup cold water
vegetable coloring preferred

Add the coloring to the water, gradually add this to flour. Knead as for bread. Store in plastic bag in refrigerator.

Asbestos Clay Mixture (for 5-year-old children and older)

for each child:

1 cup asbestos (buy at a building supply store)
1 teaspoon wheat paste
add water to get clay consistency

10-pound bag of asbestos for a class of fifteen children.

*Paste: (cooked)

Mix the desired amount of cornstarch or any powdered starch with a little cold water until it is smooth. Add hot water and boil up once. When cool, it should be the consistency of thin library paste. Keep tightly covered. It is better to make fresh for each use.

*Paste: (uncooked) for paper mache work

To 1/2 cup cold water add sufficient amount of wheat paste to make a creamy, thick paste. Make fresh each day.

Cook for dolls and larger animals (Large paper mache work)

Mix flour and w
lespoon flour t
with only a lit
Stir in rest of
heat until it t
heavy cream. S

Uncooked for pa

Make a thicker

4 to 6 tablespo
1 tablespoon sa
1 cup water

Tear newspaper
gradually to th
most of it is a
in the flour mi

Soap Bubble Mix

In a quart jar

1/4 cup Lux fla
1 teaspoon suga
4 tablespoons g

Fill rest of ja
add 5 drops of

Children may us
tic straws, and

* from "Your Ch
C. S. Parker.

old water
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the water, gradually add
d as for bread. Store in
gerator.

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t of cornstarch or any
a little cold water un-
d hot water and boil up
should be the consisten-
ste. Keep tightly cov-
o make fresh for each

or paper mache work

add sufficient amount
e a creamy, thick paste.

rger animals (Large pap-

Mix flour and water in proportions of 1 tablespoon flour to 1 cup water. Mix flour with only a little cold water until smooth. Stir in rest of water, cook over very low heat until it thickens to the consistency of heavy cream. Stir constantly.

Uncooked for paper pulp modeling

Make a thicker paste:

4 to 6 tablespoons flour
1 tablespoon salt
1 cup water

Tear newspaper in small bits. Add water gradually to the paper. Let stand until most of it is absorbed by the paper. Stir in the flour mixture slowly.

Soap Bubble Mixture

In a quart jar mix:

1/4 cup Lux flakes
1 teaspoon sugar
4 tablespoons glycerin

Fill rest of jar with warm water. To color add 5 drops of vegetable coloring.

Children may use various size tin cans, plastic straws, and empty spools.

---

* from "Your Child Can Be Happy in Bed" by C. S. Parker.

Magic Modeling Goop

2 cups salt
2/3 cup water
1 cup cornstarch (loose)
1/2 cup cold water

Mix salt and 2/3 cup water in saucepan, stirring until mixture is well heated -- 3 to 4 minutes. Remove from heat and add cornstarch which has been mixed with 1/2 cup cold water. Stir quickly. Mixture should be consistency of stiff dough. If mixture does not thicken, place over low heat and stir, about one minute until it forms a smooth pliable mass. Mix can be kept indefinitely if wrapped in clear, plastic bag.

Soap Paint

Add warm water, a little at a time to approximately 3 cups of Tide. Mix to consistency of heavy cream. Put into several smaller containers and color with small amount of paint (powder or regular) or food coloring. Can be applied with fingers or with brush.)

e)

vater in saucepan, stir-
well heated -- 3 to 4
heat and add cornstarch
vith 1/2 cup cold water.
should be consistency
xture does not thicken,
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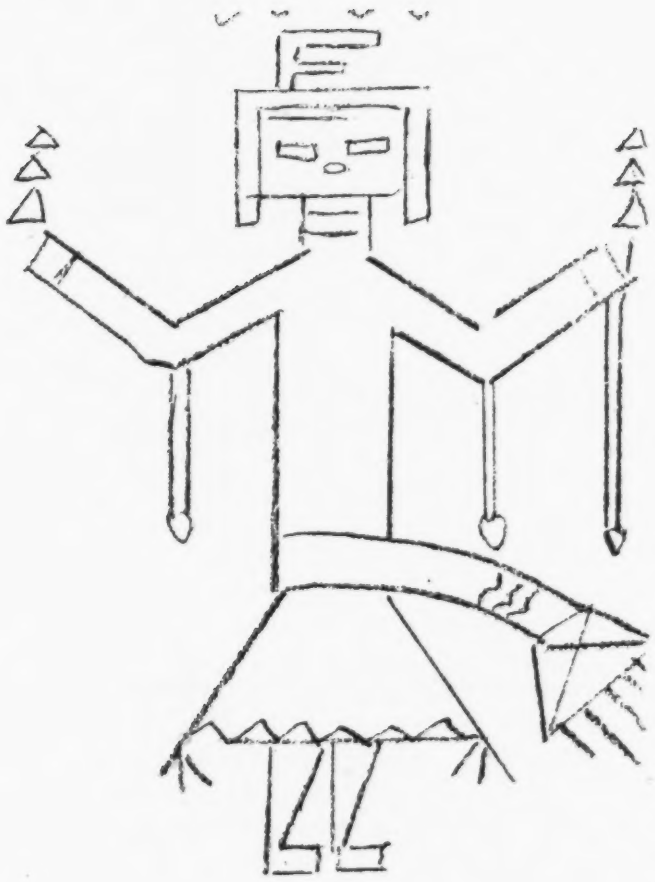

FUN MATERIAL TO SAVE
(Another partial list)

Aluminum foil
Ball bearings
Barrel hoops
Beads
Belts
Blankets
Bottles
Boxes
Bracelets
Braiding
Brads
Brass
Brooches
Buckles
Buckram
Burlap
Buttons
Candles
Cartons
Canvas
Celluloid
Cellophane
Celotex
Chains
Chalk
Chamois
Clay
Clock springs
Cloth
Colored pictures
Confetti
Containers
Copper foil
Cord
Corn husks
Corn stalks
Costume jewelry
Crayon pieces
Crystals
Emery cloth
Excelsior
Eyelets
Fabrics
Felt
Felt hats
Fibre
Flannel
Flit gun
Floor covering
Gimp
Gimp nails
Glass
Gourds
Hat boxes
Hooks
Inner-tubes
Isenglass
Jars
Jugs
Lacing
Lampshades
Leather remnants
Linoleum
Marbles
Masonite
Metal foil
Mirrors
Muslin
Nails
Necklaces
Neckties
Oilcloth
Orange stick
Ornaments
Pans
Paper bags
Paper boxes
Paper cardboard
Paper corregated
Paper dishes
Paper doilies
Paper napkins
Paper newspapers
Paper tissue
Paper towels
Paper tracing
Paper tubes
Paper wallpaper
Paper wrappings
Phonograph records
Photographs
Picture frames
Pine cones
Pins
Pipe cleaners
Plastic bags
Plastic board
Reeds
Ribbon
Rings
Rope
Rubber bands
Rubberized cloth
Rug yarn
Safety pins
Sand
Sandpaper
Sea shells
Sealing wax
Seeds
Sheepskin

Taken from: The Elementary Course of Study, Interim Report - Bulletin 2338. 1949 Pennsylvania Department of Public Instruction

FUN MATERIAL TO SAVE
(Another partial list)

Crayon pieces
Crystals
Emery cloth
Excelsior
Eyelets
Fabrics
Felt
Felt hats
Fibre
Flannel
Flit gun
Floor covering
Gimp
Gimp nails
Glass
Gourds
Hat boxes
Hooks
Inner-tubes
Isenglass
Jars
Jugs
Lacing
Lampshades
Leather remnants
Linoleum
Marbles
Masonite
Metal foil
Mirrors
Muslin
Nails
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Plastic bags
Plastic board
Reeds
Ribbon
Rings
Rope
Rubber bands
Rubberized cloth
Rug yarn
Safety pins
Sand
Sandpaper
Sea shells
Sealing wax
Seeds
Sheepskin
Shoelaces
Shoe polish
Snaps
Soap
Sponges
Spools
Steel wool
Stockings
Sweaters
Tacks
Tape
Thread
Tiles
Tin cans
Tin foil
Tongue depressors
Towels
Tubes
Twine
Wall board
Wax
Window blinds
Wire
Wire eyelets
Wire hairpins
Wire hooks
Wire mesh
Wire paperclips
Wire screen
Wire staples
Wooden beads
Wooden blocks
Wooden boards
Wooden clothespins
Wooden dowels
Wooden sticks
Wool
Yarn
Zippers

Elementary Course of Study, Interim Report -
letin 2338. 1949 Pennsylvania Department of
lic Instruction

BOOKS TO CONSULT

Creative Arts:

Art and Indian Children, Curriculum Bulletin, No. 7. Institute of American Indian Arts, Santa Fe, N. M. 1970

Masks, Mantas and Moccasins, Brown, Donald N. Taylor Museum of Colorado Springs. Fine Arts Center. 1962.

Art of the American Indian, Glubok, Shirley. Harper, 1964.

Indian Beadwork, Hofsinde, Robert (Gray Wolf) New York, William Morrow. 1958.

Indian Games and Crafts. Hofsinde, Robert (Gray Wolf) New York, William Morrow.

Indian Art of the American. Appleton, Leroy H. New York, Scribner & Co. 1950.

Indian Craft Designs. Hening, Vi. Eukabi Publishers P. O. Box 7481 Albuquerque, New Mexico, 1960

Other books in the series of Eukabi Publishers which contain designs, suggestions and ideas are:

Read and Color Books: Pueblo, Navajo, Hopi and Zuni, Indians of the Plains, Famous Chiefs, Apache.

Cut and Color Books: Kachina Dolls, Indian Dances.

Book of Indian Life and Crafts. Norbeck, Oscar E. Association Press. 1966.

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Press. 1966.

Stones, Bones and Arrowheads. Shannon, Terry. A. Whiteman. 1962.

Tyee's Totem Pole. Shannon, Terry. A. Whiteman. 1956.

This is a Hopi Kachina. Wright, Barton and Evelyn Boat. Flagstaff, Arizona: Museum of Northern Arizona. 1965.

Art Activities for the Very Young. Hoover, Lewis. Davis Publications, Worcester, Mass.

Art for the Family. Amico, Victor D. The Museum of Modern Art, II West 53rd Street, New York. 1954

Children's Drawings from Lines to Pictures. Biber, Barbara, Bank Street College of Education Publications, 69 Bank Street New York, New York. 1967

Art for the Young Child, Bland, Jane Cooper. The Museum of Modern Art, 1968.

Art for the Young Child. Jameson, Kenneth. Viking Press, New York. 1968.

Art for the Elementary School. University of the State of New York, State Dept. of Education, Albany, New York.

Puppets for Play Production. Renfro, Nancy. Funk and Wagnalls, New York. 1969

SIMPLE GAMES FOR KINDERGARTEN CHILDREN

To help kindergarten children:

1. Improve self-concept.
2. Develop ability to listen with underst
3. Develop ability to follow directions.
4. Increase visual perception.
5. Ask questions.
6. Be more articulate.

GAMES

1. Have a child place four small sticks under four moccasins, one s the other children guess which stick is marked.

2. Identify school sounds such as pencil sharpener, pages of book be hands, bells, scissors cutting, clock.

3. Identify familiar sounds with eyes closed such as closing door, k ping hands, running water, walking across floor, stamping, coughi

4. Use instruments for variation in pitch: high, low, loud, soft.

5. Take a walk and listen to outdoor sounds.

6. Use a tape recorder and identify children's voices.

7. "Wiggle Waggle." One child is chosen to be IT. He names parts o left hand, thumb, nose, right foot, head, left ear, both hands. the children wiggle the part names.

8. "Simon Says."

9. "Looby Loo."

10. "Hokey Pokey." You put your left foot in, you put your left foot left foot in and turn yourself about. That's what it's all about

11. Hide a loud ticking clock and have children find it.

12. Have one child be a mother cat, sheep, dog, or horse. Have him co the animals hide in the room. The mother cat, sheep, dog, or hors mals by listening to "meows", "barking", "baaing", or "neighing".

SIMPLE GAMES FOR KINDERGARTEN CHILDREN

To help kindergarten children:

1. Improve self-concept.
2. Develop ability to listen with understanding
3. Develop ability to follow directions.
4. Increase visual perception.
5. Ask questions.
6. Be more articulate.

GAMES

place four small sticks under four moccasins, one stick being marked. Have ldren guess which stick is marked.

ol sounds such as pencil sharpener, pages of book being turned, clapping scissors cutting, clock.

liar sounds with eyes closed such as closing door, knocking on door, clap- nning water, walking across floor, stamping, coughing.

s for variation in pitch: high, low, loud, soft.

nd listen to outdoor sounds.

order and identify children's voices.

." One child is chosen to be IT. He names parts of the body such as: mb, nose, right foot, head, left ear, both hands. As he names the part, iggle the part names.

You put your left foot in, you put your left foot out, you put your nd turn yourself about. That's what it's all about."

cking clock and have children find it.

be a mother cat, sheep, dog, or horse. Have him cover his eyes while de in the room. The mother cat, sheep, dog, or horse locates the ani- ing to "meows", "barking", "baaing", or "neighing".

13. Have small group of children in a semicircle. Have
and hop, clap, or jump, then ask, "What did I do?"

14. "I Spy". Have a child hide an object and have severa
loudly when they are close, and softly when they are

15. Repeat a list of words and have the children listen a
sound like the others.

16. Dramatize stories and act out the animals in games an

17. Blindfold a child and have him go around the room wit
things. Have him ask questions to get clues.

18. Have children guess what imaginary objects might fit
shapes.

19. Have children listen to short stories that are famili

20. One child says, "I saw a child this morning." "What

21. "Did you ever see a Lassie - a Laddie - substitute na
your sister - your dog - your cat - etc.

22. To the tune of "Here We Go Round the Mulberry Bush"

"My head - my naa' khook,
My shoulders - my tal-li-khok,
My knees - my sit-khook,
My toes - my poc-to-ghook,
Let's all be strong together."
Words are repeated three times as the different part

23. <u>Home on the Tundra</u> - to the tune of Home on the Rang

Oh give me a home between Unalakleet and Nome,
Where the moose and the caribou play.
Where nothing will grow cause it's covered with snow
From June to the following May

Home, home in the snow, where it's mild if it's nine
Oh the tundra's for me by the cold Bering Sea
And the life of the gay Eskimo.

l group of children in a semicircle. Have a child go behind the children
lap, or jump, then ask, "What did I do?"

Have a child hide an object and have several children try to find it. Clap
n they are close, and softly when they are far from the object.

ist of words and have the children listen and tell which word or words do not
the others.

stories and act out the animals in games and songs.

a child and have him go around the room with a staff member touching various
ave him ask questions to get clues.

ren guess what imaginary objects might fit in boxes of various sizes and

ren listen to short stories that are familiar to them, and play the parts.

says, "I saw a child this morning." "What was he doing?" Child demonstrates.

ver see a Lassie - a Laddie - substitute names - your mother - your father -
r - your dog - your cat - etc.

e of "Here We Go Round the Mulberry Bush" - from Alaska:

my naa' khook,
rs - my tal-li-khok,
my sit-khook,
ny poo-to-ghook,
be strong together."
repeated three times as the different parts of the body are touched.

e Tundra - to the tune of Home on the Range (from Alaska):

a home between Unalakleet and Nome,
noose and the caribou play.
ing will grow cause it's covered with snow
to the following May

in the snow, where it's mild if it's ninety below
dra's for me by the cold Bering Sea
fe of the gay Eskimo.

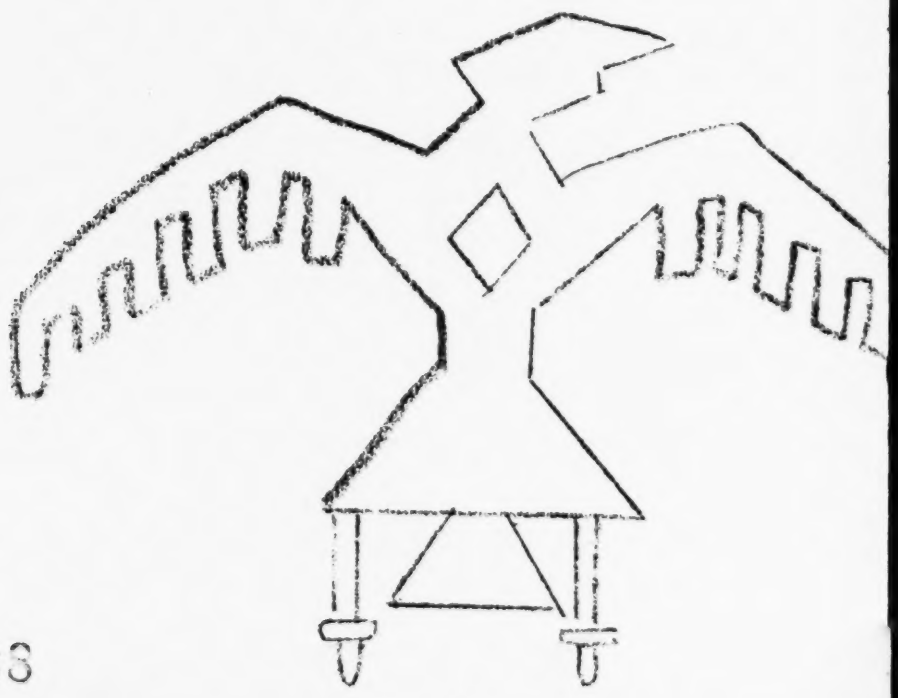
24. To the tune of Here We Go Round the Mulberry Bush --
    This is the way we ride a horse.....
    This is the way we build a hogan.....

25. To the tune of We Are Climbing Jacob's Ladder --
    We are climbing up the mesa.....
    We are finding little pebbles.....
    We are riding slowly slowly.....
    We are carding woll together (GIRLS).....
    We are carrying wood for fire (BOYS).....etc.

    For last line usually sung "Soldiers of the Cross", substitute "Children of the School" or ?????????

26. Making animal sounds in both the native language and English..
    in native tongue?
    in English?

    What does the cat say (same as above)
    What does the bird say (same)
    Etc. -- Make up your own with the familiar animals of the local



We Go Round the Mul-

ride a horse.....
build a hogan.....

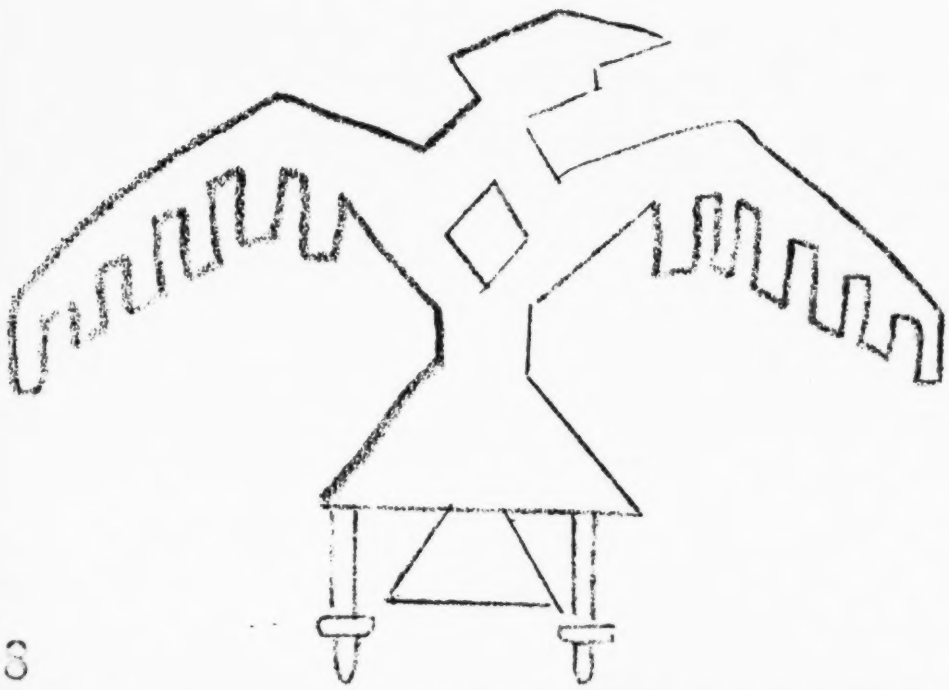
e Climbing Jacob's

he mesa.....
e pebbles.....
slowly.....
together (GIRLS).....
for fire (BOYS).....etc.

y sung "Soldiers of the Cross", substitute "Indian Children We" or
ool" or ?????????

in both the native language and English.. What does the dog say --

y (same as above)
ay (same)
own with the familiar animals of the locale.



GAMES TO MAKE

1. A matching board lotto game can be constructed using fa
children, for example, the matches would consist of pic

mukluks		twins
mittens		earri
socks		glass
animals:	dog	ears
	reindeer	eyes
	caribou	hands
		feet

2. Another lotto game could be made by matching Things Tha
Eskimo children, pictures or drawings of the following

kyack and paddle	fire
parka and cover (ah-tee-look)	snowm
harpoon and whale	drum
boat and motor	wolf
fish and net	muktu

mother and father
mother and baby
hide and scraper

3. Number boards could be made using pictures of: whale,
cats, ducks, fish, mittens, knives and candles.

What objects could be used with Navajo, Seminole, or Ch
group you are teaching?

GAMES TO MAKE

oard lotto game can be constructed using familiar items. For Eskimo
r example, the matches would consist of pictures or drawings of:

ukluks		twins
ittens		earrings
ocks		glasses
nimals:	dog	ears
	reindeer	eyes
	caribou	hands
		feet

o game could be made by matching Things That Go Together. Again, for
dren, pictures or drawings of the following items could be arranged:

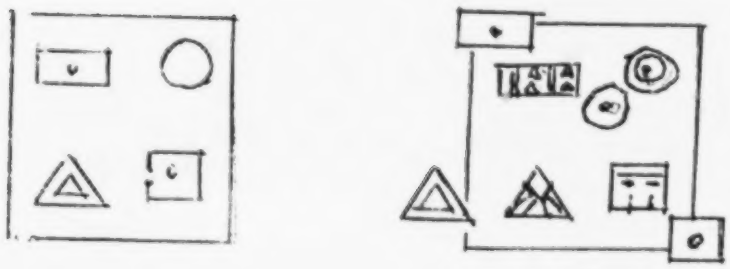
rack and paddle	fire and driftwood
arka and cover (ah-tee-look)	snowmobile and sled
arpoon and whale	drum and wand
oat and motor	wolf and gun
ish and net	muktuk and ooloo

mother and father
mother and baby
hide and scraper

ds could be made using pictures of: whale, walrus, caribou, seals, dogs,
, fish, mittens, knives and candles.

s could be used with Navajo, Seminole, or Cherokee children? With the
re teaching?

FORM AND NUMBER BOARDS
(Made by Kindergarten Teaching Staffs, Training Session,



A form board with obl
and square. When pie
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A form board using fa
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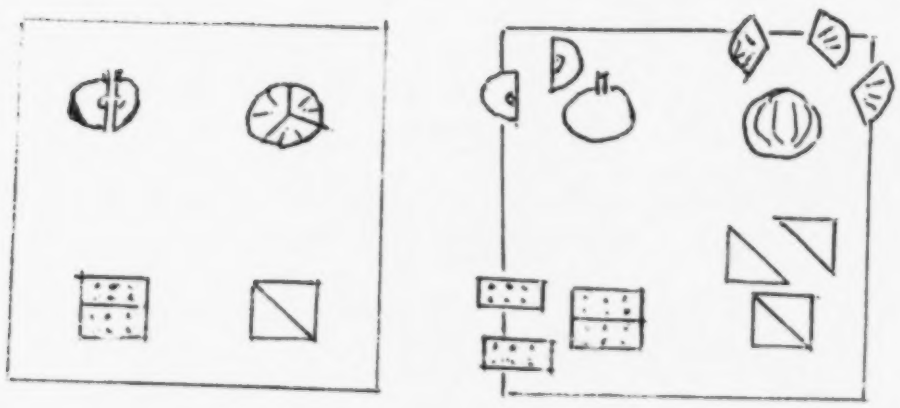
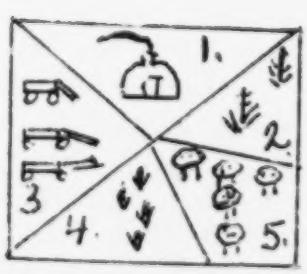
orange, graham cracke





A number board using familiar objects: a hogan, cactus plants wagons, corn, sheep, typical of Navajos.

Domi
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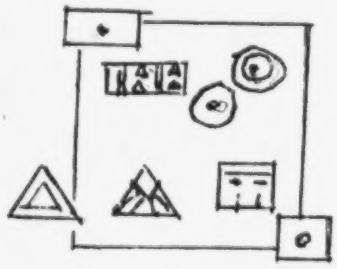
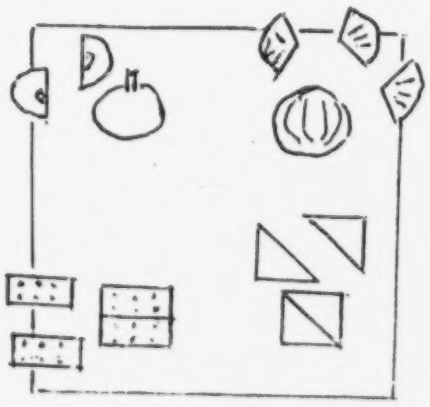
FORM AND NUMBER BOARDS
by Kindergarten Teaching Staffs, Training Session, Summer 1968)

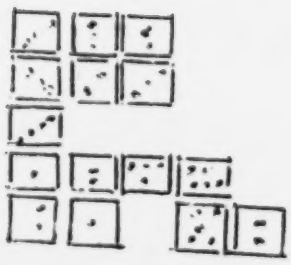


A form board with oblong, circle, triangle and square. When pieces are lifted out there are pictures underneath of familiar objects: a rug, a basket, a tepee and a square house, typical of Pueblos.



A form board using familiar foods that kindergarteners will have at school: an apple, orange, graham cracker and toast.

A number board using familiar objects: a hogan, cactus plants wagons, corn, sheep, typical of Navajos.



Dominoes made with native seeds on cards.

DEVELOPMENT OF HEALTH AND SAFE

The major aim of a health program is to produce sturdy Indian children with optimum mental, emotional, social, and physical health - children with energy and enthusiasm for life's activities, children with good attitudes about themselves and others -- all within a safe and healthful environment which fosters and maintains the children's well-being.

Health education should be practical and based on the problems which the child faces in his daily living at home, school, and in the community.

In the kindergarten classroom with the help of teachers and nurse, children learn to respect and use their bodies; to gain knowledge of the importance of good health habits including rest, good food, and exercise, as well as basic rules of safety, and to incorporate them in their daily living.

The kindergarten teacher should be aware of differences among children in mental and physical needs. Like many other parents, Indian parents may not always understand developmental stages of child growth. Interaction among parents, teachers, and health personnel may be necessary before there is an understanding of these stages and an acceptance of them.

Health education in the kindergarten gives the child an opportunity to develop positive attitudes toward health which he can apply to his own behavior, and helps the staff to become more aware of necessary differences in approach to the health of Indian children.

OBJECTIVES

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DEVELOPMENT OF HEALTH AND SAFETY CONCEPTS

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espect for his own bod-

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b. To associate health practices with personal comfort and well-being.

c. To learn how to care for his body - to be aware of aches, pains, fatigue, over-excitement, care of minor cuts and bruises.

d. To learn good health habits.

e. To develop rapport with and trust in medical personnel.

f. To learn to use equipment safely indoors and outdoors.

g. To learn how to maintain safe habits while riding in the bus.

h. To learn how to leave the classroom in case of emergency.

i. To learn how to handle animals safely.

EXPERIENCES

1. Make toilet facilities available so child can use them easily and with a minimum degree of direction (showing children where toilets and sinks are, encouraging them to flush the toilet and wash hands after using it).

2. Make it possible for the child to escape comfortably from continuous exposure to total group. (Nooks and corners in the classroom and playground; arranging for reading and rest corners where children may be alone; eating in small groups in a relaxed unhurried atmosphere).

3. Invite the nurse, doctor, and dentist into the classroom to talk with the children and give them the opportunity to handle and try out some of the medical equipment; to ask questions; and to act out the process of immunization, the treatment of splinters, cuts and bruises, and the care of teeth.

4. Visit the various offices of nurse, doctor and dentist to become acquainted with the medical personnel and their equipment.

5. Help child learn how to blow his nose correctly (hold tissue over bridge of nose without closing off either nostril and gently blow); to turn head aside when coughing or sneezing, and not put mouth down on bubbler of the drinking fountain.

6. Provide dramatic play materials associated with health, such as stethescopes, flashlights, tongue depressors, dolls, beds, doctors' bags, nurses' caps.

7. Supervise children as they handle carpentry tools, scissors, and sewing materials, ladders, climbing apparatus, jumping boards, boxes and barrels.

8. Dramatize riding the bus.

9. Practice exiting from classroom with mock emergency situation.

10. Give children practice in picking up, holding, carrying, and stroking animals.

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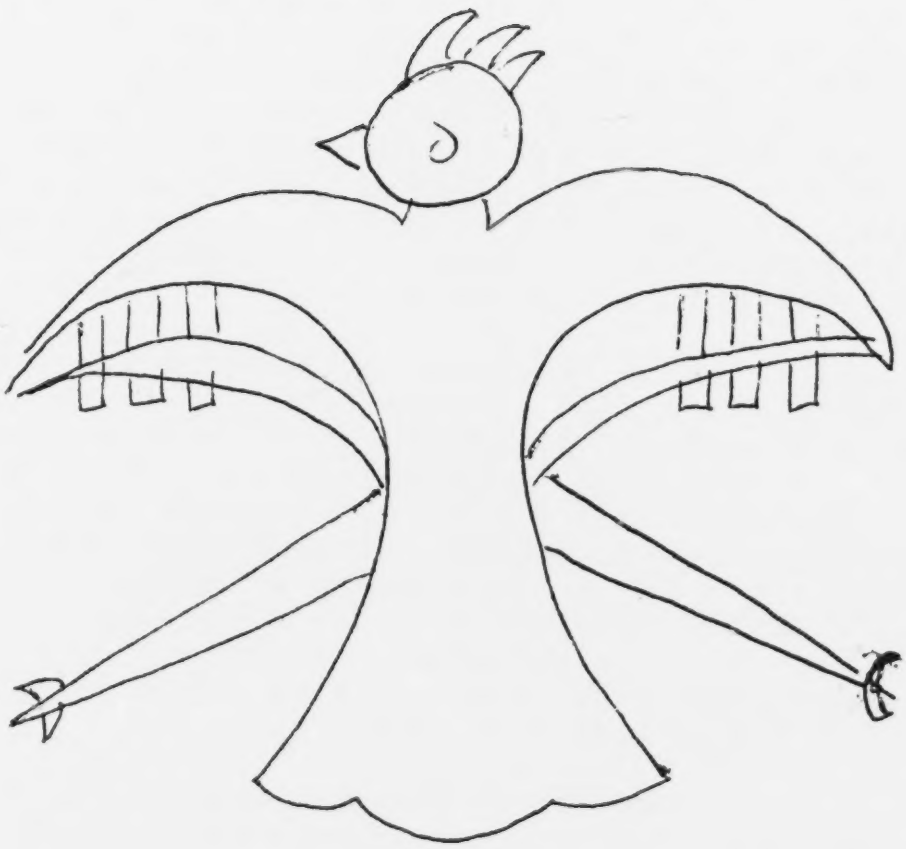

THE ROLE OF THE FOOD PROGRAM IN THE KIND

The child's body is the most important and complex machinery he will ever possess. How well it functions depends to a large extent on the quality and quantity of the foods he eats. Kindergarten children need foods that will help them grow, that will build muscle, bones, blood, and sound teeth. They need foods which will help them stay well. At this age children use tremendous amounts of energy in running, climbing, and jumping. Research reveals a direct relationship between nutrition and the ability to learn. In trying to help the child achieve a balanced diet, look at those things which are the regular staples of his diet and investigate how nutritional balance is achieved locally.

In addition to the nutritional aspects of the kindergarten food program, there is a vital role played by the adult. The child's attitude toward food is significantly influenced by the adult's own attitude toward food and eating. Eating a meal with his peers and an interested adult, in a small group at a child-size table, usually provides a setting where he can feel comfortable. An interested and relaxed attitude toward eating makes it possible for children to enjoy mealtime.

The use of foods and food preparation in the classroom cuts across virtually all areas of learning: it encourages conversation and questions; Mathematics can be illustrated through various ways of measuring ingredients and portions for serving and in setting tables; Science concepts can be learned through the transformation of materials; liquids to solids, solids to liquids, and changes of texture through cooking; Language is involved throughout the food experience in the labels, color, size, shape, etc; Social Science in-

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volves experiences with community foods. Another extremely useful, actually crucial, aspect of the food program is the opportunity it provides for the development of Social Competency in the children. For example, handling equipment, sharing in the mixing of ingredients, setting the table, and serving food are all important social skills which children can learn.

The joy of an attractive table with colorful food arranged on plates can give not only the much desired bodily nourishments, but it is part of an Aesthetic experience as well. Color, texture, and the shape of foods affect the eye and mouth in a pleasing fashion and nourish the soul as well as the body.

Cooking in the kindergarten has many important features. One of the earliest satisfying experiences children have with their mothers centers about eating. To help children in their transition from the familiar home setting to the school environment, cooking is a major building stone for constructing the bridge.

THE CHILD'S FAMILY

The child's eating habits and attitudes are influenced by his family life and relationships. Food customs are influenced by a variety of factors such as social, cultural, religious, geographic, etc. In planning meals at the kindergarten, nutritionists will recognize the individual food customs and eating habits among families of the children.

It is important the kindergarten teaching staff plan closely with the child's family. (See Parent Involvement in the Kindergarten)

THE OTHER PEOPLE INVOLVED IN THE FOOD PROGRAM

The food service personnel, the principal, the sanitarian and health officer are all essential members of the kindergarten food program team. They are the people, with the teaching staff who can provide the ideas, can plan necessary procedures with equipment and supplies to see that the food service will work in each individual situation. It is essential that the teaching staff work closely with them to assure the success of the program.

HINTS FOR FOOD SERVICE MANAGEMENT
(Must be Adapted to Individual Situation)

The kindergarten program for young Indian children emphasizes food service which includes breakfast or mid-morning snack, lunch and afternoon snack depending on the length of the school day.

Through satisfying experiences in meal service and in cooking, young children develop good eating patterns and attitudes. They learn to:

a. eat a variety of wholesome foods.
b. find pleasure in eating.
c. appreciate mealtime as a time for companionship and communication with others.
d. master simple mechanics in eating.
e. develop an interest in preparing simple foods.

Food is only one part of the mealtime experience. Pleasant, comfortable eating experiences in a good physical environment (suitable size tables and chairs, plates, cups and utensils easily managed by small hands) are as important as proper food.

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The home like, social situation, where children and grownups eat together in small groups (six to seven children with an adult) at tables set for family-style service, gives the teachers an opportunity to know the children in an atmosphere not duplicated in the classroom and the child has full opportunity for participation in the total process. (See all sections on Curriculum for learning experiences).

Routines before and after meals are as important as the meal itself. At lunch, for example, children come from outdoor play (or indoor experiences), in small groups, go to the lavatory, wash hands and get ready for a calm, leisurely meal. While most of the children finish routines and enjoy quiet activities with an adult, such as songs, stories, etc. designated children (2 or 3) and an adult clean and set tables. The adult fills serving bowls with food, fills pitchers with beverage and with children place these on tables for each group. Trays and serving carts are useful. Serving equipment and food are delivered to the classroom approximately 10 minutes before serving time. Teachers have earlier informed food service personnel of the number of people to be served.

Food is served as soon as the children are at the table.

During the meal the children eat in an unhurried relaxed atmosphere. There is conversation about their interests with friends and adults. Children pass the food, serve themselves and pour their own beverage.

Teachers help the children to assess small portions but make them feel free to ask for and have as much as they can comfortably eat.

Manners are taught by example. The child is given freedom to eat in his own way. Food, prepared by the kitchen in bite-size pieces, (of meat, vegetables and fruit) may be eaten with the fingers, those who can manage a fork will use it, if food is cut in small enough pieces. Bread is cut in halves or quarters. Butter is softened.

Sponges are provided for spills.

The children are not forced to eat, and desserts are never withheld in order to coerce them into cleaning their plates. One of the goals of educating at the table is to build a positive attitude toward food. Food, therefore, should never be used as a controlling device as this may have the opposite effect.

When a child is finished eating he is helped to clean up: throw paper goods away, scrape and stack used dishes in designated places.

Children who have finished may wish to go to the bathroom, then to a restful activity.

Adults and designated children return serving dishes and unused food to cart, to be returned to kitchen; wipe tables, brush up crumbs, and join companions.

Breakfast service can be easier if the teaching staff:

makes necessary food preparations for the breakfast meal. To simplify the food operation, do as much as possible in advance.

double check to be sure that the necessary foods and equipment are available for the following day.

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store foods properly:

carrots and celery sticks in ice water with lid in refrigerator

raisins, crackers and cereal in a dry cool place

bananas at room temperature

cheese and milk in appropriate containers in refrigerator.

A GUIDE FOR FOOD SERVICE FOR BIA KINDERGARTENS. (To be adapted to various situations in BIA schools)

The chart on the following pages outlines basic procedures for using service trucks for meal service during a long kindergarten day for breakfast or morning and afternoon snacks and lunch. It is based on the principle that there is greater economy of time and effort when equipment from a previous meal is placed directly on the truck ready for the next service. This involves using a lunch equipment truck for each kindergarten classroom plus one extra truck for transporting snacks and hot food to all kindergarten classrooms.

The chart is based on food service to three classrooms in a situation where the kitchen and classrooms are located in the same building. Adaptations will need to be made according to various physical facilities and length of kindergarten day in BIA schools.

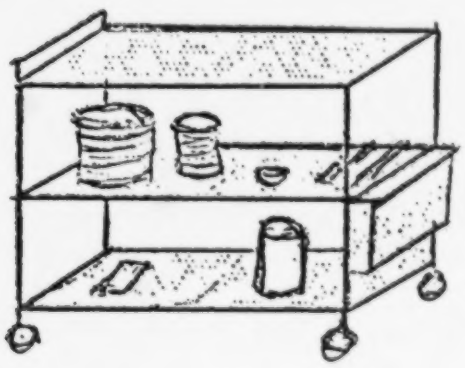
Bureau of Indian Affairs
Curriculum Development and Program Review
June, 1969

LUNCH EQUIPMENT TRUCKS

1 per classroom

etc.

As set up the afternoon before



2nd Shelf:
dinner plates
dessert plates
cups
silver
napkins
trays (optional)

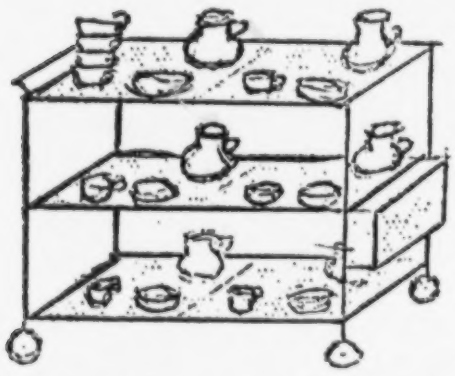
3rd Shelf:
sponge
can for silver
(optional)

8 A.M.

SNACK AND HOT FOOD TRUCK

1 per school

As set up the afternoon befor



Trays for each group contain:
pitcher
bread containers
cups

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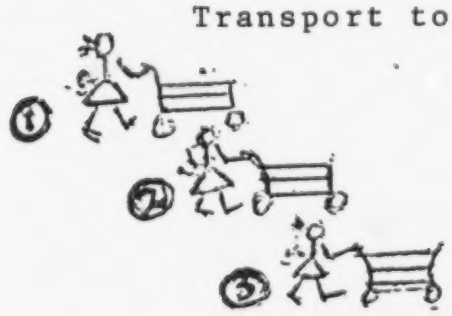
<u>Add to each tr ck</u>
Pitchers (from morning snack)
bread (containers from morning snack)
strips or salad
dessert

BEFORE
LUNCH

Transport to



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A.M.
SNACK TIME
OR
BREAKFAST

Add juice, crackers and vitamins for all groups.

Transport to classroom (1
(2
(3

1. After snac' collect cups, pitchers, etc.
2. Wash pitchers and bread containers and put on lunch equipment truck.
3. Put aside cups for washing after lunch.
4. Leave food truck empty.

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from morning snack)

BEFORE LUNCH

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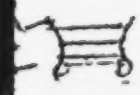


LUNCH EQUIPMENT TRUCK

SNACK AND HOT

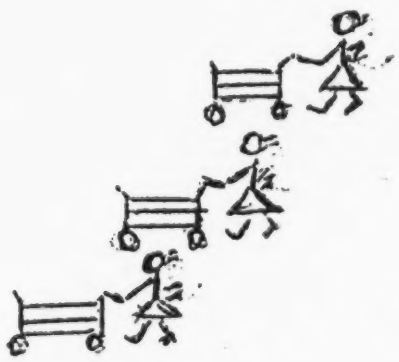
LUNCH

Place milk and
one group at a
room.

Children scrape and stack dishes

Return empty t

AFTER
LUNCH



1. Return each truck to kitchen
2. Wash and sterilize dishes
3. Stack equipment on trucks for A.M.
4. Cover.

After dishwash
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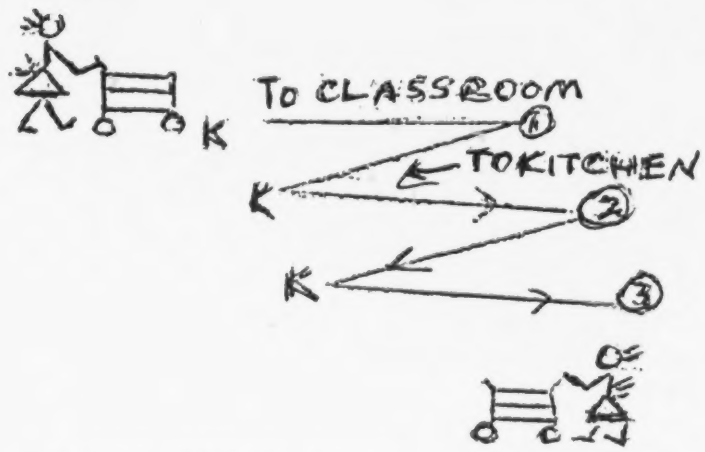
same manner as

RUCK

SNACK AND HOT FOOD TRUCK

LUNCH

Place milk and casseroles of hot food for one group at a time and transport to classroom.



nd stack dishes

Return empty truck to kitchen.

AFTER LUNCH

ruck to kitchen
ilize dishes
nt on trucks for A.M.

After dishwashing, set up truck with pitchers, cups, etc. for P.M. snack in the same manner as for A.M. snack (see above).

317

318

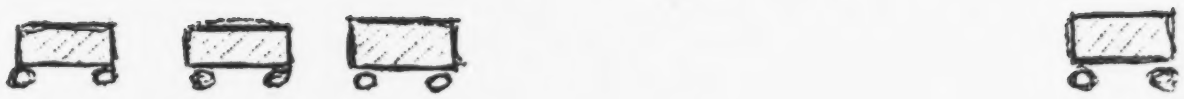
P.M.
SNACK TIME

Add the milk
etc. for all

Transport to

After snack,
etc. and wash
for A.M. and

4 P.M.



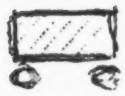
P.M.
SNACK TIME

Add the milk and cookies or sandwiches, etc. for all groups

Transport to classrooms (1
(2
(3

After snack, collect cups, pitchers, etc. and wash and sterilize. Set up for A.M. and cover.

4 P.M.



LIST OF EQUIPMENT AND SUPPLIES NEEDED FOR FOOD SERVICE IN CLASSROOM

(20 children, 3 table settings)

1 doz. casserole (bowls, stainless steel, with cover, 2 quart
3 pitchers with cover, 1 quart
3 baskets, bread
4 trays, fiberglass 14"x18", serving
2 doz. fruit dish, Melmac
2 doz. plate 8", Melmac
2 doz. cup 7 oz. stacking
2 doz. fork, stainless steel
2 doz. knives, stainless steel
2 doz. teaspoon, regular
1 doz. tablespoon, serving
1 standard duty utility cart, 3 shelf
1 hot food truck - if food carried some distance
2 tray cutlery
napkins
1 utility caddy 29"x 18 1/2", with disposal bags
4 sponges for wiping spills
1 large garbage container for carrying flatware and dishes, if food carried some distance.

COOKING EXPERIENCES

In designing cooking activities, the teacher may see her goals as helping the child to:

Understand how food is prepared.
Plan, read recipes, make a recipe book.
Use measuring utensils.
Sample new and unusual foods.
Appreciate food of different tribes and lands.
Value his own food and its method of preparation as part of his heritage.

This is no
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art of his heritage.

This is not to suggest that cooking is to be viewed as an isolated activity apart from the child's cultural heritage, or separate from his social studies, science, mathematics, or language arts curriculum. Each of these components of the cooking experience should be developed as a part of the entire experience.

Home and school experiences of the Indian child can be connected through the vehicle of classroom cooking. Utensils, odors, tastes, and sights familiar to the child are brought into the classroom. Thus, the child is made to feel at ease in the school setting for it is no longer so alien to him, his home and his tribe.

Tasting and cooking experiences are dictated by the availability of resources and local customs. If cooking in the home is normally done out of doors, then classroom cooking should be done out of doors. The opportunity to compare the materials and experiences will be valuable. Invite parents or grandparents into the class to demonstrate a cooking experience; assist the parent in her role as teacher, showing respect and deference for her knowledge and skills as an expert. Take children to houses of parents to provide a chance to taste and to share in another person's home, if this is appropriate to your area.

Like other activities in the classroom cooking experiences must be well planned and organized. Check and double check equipment, materials and room setup. If the experience is to be a happy one, it must be preceded by much planning with youngsters, keep the group small, 4-5 children. Each child must know his responsibility and role

before he embarks on this exciting adventure of cooking. The teacher takes the responsibility for the accurate heat of the oven and for putting the prepared dish into and taking it out of the oven. The teacher carefully supervises the use of the stove or hot plate.

When charts of recipes are made for young children, learning to read them precedes the cooking experience. It is advisable to have the necessary ingredients and utensils on a table below the recipe chart. Experiment with using a level teaspoon. Measure water or dry ingredients into one, one half, one fourth cups (or whatever measurements recipe needs). Children may find the pictured ingredient on the chart and the real ingredient on the table.

LIST OF EQUIPMENT AND SUPPLIES FOR COOKING EXPERIENCES

(To be adapted to individual situation. Also see Equipment and Supplies Housekeeping and Family Life Play).

1 hot plate, 2 burners
1 electric skillet
1 toaster
1 rotisserie oven
1 small refrigerator w/ice cube maker
1 blender
4 plastic mixing bowls, full size
2 baking tins, full size
1 frying pan, full size
12 cookie cutters
2 egg beaters, full size and good quality
2 rolling pins, full size
6 wooden spoons, full size
2 measuring cups w/spoons full size
4 plastic containers for salt, flour, etc.
1 muffin tin, full size

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ENT AND SUPPLIES FOR COOKING

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g bowls, full size
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iners for salt, flour, etc.
full size

1 double boiler, full size
1 sifter, full size
2 cookie sheets, full size
6 dish cloths
4 dish towels
6 plastic aprons to protect clothing
6 tablespoons
1 large, 4 quart sauce pan, w/lid
1 small 1 quart sauce pan, w/lid
1 each, can opener and vegetable peeler
1 each, paring knife, butcher knife, strainer large and small
4 pot holders
2 rubber spatulas

COOKBOOKS

Driver, H.E. Indians of North America. Chicago: University of Chicago Press. 1961

Kimball, Yeffe and Jean Anderson. The Art of American Indian Cooking. Garden City, N. Y. Doubleday and Co. 1965.

McClain, Sam (publ.) Authentic American Indian Recipes. P. O. Box 2, Pawhuska, Oklahoma. 1958

Students of Shishmaref Day School. Eskimo Cook Book. Alaska Crippled Children's Association, Box 912, Anchorage, Alaska. Price 60 cents postpaid.

Wright, Muriel. American Indian Corn Dishes. Chronicles of Oklahoma. Vol. 36, No. 2 Summer, 1958

PAMPHLETS

Food for Groups of Young Children Cared For During the Day -- Helen M. Hille, Institutional Nutrition Consultant, U. S. Department of Health, Education, and Wel-

fare, Social Security Administration, U. S. Children's Bureau, 25 cents.

Handbook of Food Preparation -- American Home Economics Association, 1600 20th St., N.W., Washington, D. C., 50 cents.

Food Storage Guide for Schools and Institutions -- P.A. 403, Agricultural Marketing Service, U. S. Department of Agriculture, Washington, D. C., 25 cents.

Your Child From One to Six -- U. S. Children's Bureau, Publication No. 30, U. S. Department of Health, Education and Welfare, Washington, D. C., 20 cents.

Feeding Little Folks -- Published by National Dairy Council, Chicago, Ill. Can be obtained from State Dairy Council.

Food For the Family With Young Children -- Prepared by Consumer and Food Economics Research Division, U. S. Department of Agriculture, Washington, D. C., 10 cents.

Government publications may be purchased by writing the Superintendent of Documents, Washington 25, D. C. Be sure to enclose the required funds.

RECIPES FOR COOKING WITH CHILDREN
(For further recipes ask the parents)

The following recipes are examples of cooking activities that can be done with children. Preparation of cereals, applesauce, cocoa, chocolate pudding, frosting, and candies are acceptable activities, but to further the child's acceptance of the value of his culture, typically Indian recipes are included.

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Milkweed or co
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The Blackfeet
recipes:

Indian Grease

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3 t. baking pow
1 t. salt
1 1/2 cups wate

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o Six -- U. S. Children's
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Hominy (Indian Pop Corn)

White corn is soaked in moist juniper ashes (if available).
Corn is then boiled; ash and hulls are washed off.
Kernels that were soaked in salt water are parched on hot sand.
The outer coat will split, yielding a kind of pop corn.

Piki (Wafer Bread), Hopi

A fire is built under a stone slab which has been oiled.
When the surface is hot, it is covered with several handfuls of thin gruel from blue corn meal.
Baking powder can be used to prevent the meal from turning red.
This mixture cooks quickly and can be peeled away from the stone.

Chewing Gum

Milkweed or cotton weed is a form of Hopi gum.

The Blackfeet Indians offer many interesting recipes:

Indian Grease Bread

4 cups of flour
3 t. baking powder
1 t. salt
1 1/2 cups water

Stir flour, baking powder and salt into a bowl, gradually adding the water. If the dough is too moist, add more flour, knead dough till it no longer sticks to hands. Place dough on a floured surface.

Shape dough into round balls, then flatten balls. Punch holes in the center. Deep fry in a large skillet, half filled with liquid shortening. Fry them for about five minutes on each side. Serve hot or cold.

Raised Fry Bread

1 to 1 1/4 cup warm milk
2 T. soft shortening
2 T. sugar
2 tsp. salt
1 package dry yeast
3 cups sifted flour

Dissolve yeast in Milk. Add shortening, salt, sugar and one-fourth of the flour. Beat until smooth, scraping sides and bottom of bowl frequently. Add remaining flour and blend until smooth. Let rise in warm place about 30 minutes. Punch down and knead. Let rise again. Break into doughnut size pieces and shape flat, cutting a slit into hot fat, turning the bread until both sides are golden brown. Drain on a paper towel and serve while warm. A favorite way to eat fry bread is to dip it into a small amount of syrup.

-- Delores Hall
Browning, Montana

Cracklings

Dice fat from beef, pork, bacon rind, or salt pork. Place diced fat in a baking pan and set in a medium low oven. Drain pieces of fat as they bake. Continue this process until diced fat is crisp. Cool and salt.

-- Delores Hall
Browning, Montana

Indian Pemmican

5 cups dry meat
3 cups mashed cherries

1/4 cup sh
1/4 cup su

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elores Hall
rowning, Montana

ries

1/4 cup shortening
1/4 cup sugar

Mix the dry meat, mashed cherries, and shortening together in a large bowl. Add the sugar to the mixture and serve.

-- Thomas Horn
Browning, Montana

Baked Trout

1 or more large trout, cleaned and washed. Brush cavity with oil or butter. Stuff cavity tightly with 2 chopped onions, 4 large sticks of celery, chopped, and several springs of parsley. Lay several bacon slices over the trout. Sprinkle with salt and pepper or any other desired seasoning. Bake for 1 hour at 375 degrees.

Sauer Berry Soup

3 cups sauer berries (dried, fresh, or frozen)
9 cups water

Wash the berries. Place in saucepan and cover with water. Boil for about 30 minutes. When the berries are cooked, make a paste of 2 T. flour, 3 T. sugar and water. Slowly add the paste to the berry soup. Cook until the desired thickness is obtained. Serve while still hot. More sugar may be added if desired.

Jam or Jelly

Wrap fresh choke cherries in a thin cloth and boil in water. Add equal amounts of water and sugar to the cherry juice. The amount of sugar depends on the desired flavor. Add a package of Sure-Jel.

-- Carolyn Blackman
Browning, Montana

Ba na ha'

1 pound dry peas
corn meal (plain)
corn shucks

Soak peas in water overnight, drain. Cook until tender. Drain and save liquid. Moisten corn meal with above liquid. Add cooked peas. Roll into a ball about the size of a medium tangerine. Place this roll in corn shuck and tie with strip of corn shuck. Put this in a pot of water and boil for 30 minutes to 1 hour.

This rolled ball served as bread and was eaten with fresh meat.

-- Kathy King, Rosanell Phillips
Choctaw, Mississippi

Mix ingredients together until it forms a ball. Shape into small balls (teaspoon size) flatten with hand, place on pan and bake. Heat oven to 350 degrees, bake 8 minutes.

Breakfast in a Glass

1 egg
1 cup milk
1/2 cup fruit

Place in blender and blend.

Corn on th

2 cups wat
20 ears (p
Control -

Cover and
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in 15 minu

Pop Corn -

1 cup pop
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Place corn
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Spritz

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Kathy King, Rosanell
Phillips
Choctaw, Mississippi

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nd blend.

Corn on the Cob - Electric Skillet

2 cups water
20 ears (place in skillet with 1 tsp. sugar)
Control - 250 degrees F

Cover and open vents until water boils, close vents, turn temperature to 200. Cook in 15 minutes.

Pop Corn - Electric Skillet

1 cup pop corn
1/2 cup oil
1 - 2 tsp. salt
1/4 - 1/2 cup butter

Place corn and oil into skillet, set temperature at 400 degrees F vents closed. When light goes off, and leave lid on until corn stops popping, approximately 2-3 minutes. Season with salt and melted butter. Yield 4 quarts.

Spritz

Mix thoroughly: 1 cup soft butter
2/3 cup sugar
3 egg yolks
1 tsp. flavoring (almond of vanilla or 1/4 cup grated almonds.

Work in with the hands: 2-1/3 cups flour.

Force the dough through cookie press onto ungreased baking sheet in desired shapes. Bake until set...but not brown...Bake 400 degrees F. 7 to 10 minutes. Yield about 6 doz.

Apple Sauce

Let each child peel an apple (using a vegetable peeler) - put the apples in a pot with just enough water to start them cooking. When tender mash; add sugar (4 cups for 24 apples) cook again for 10 minutes.

Vegetable Soup

After talking about vegetables that make good soup, children might take a trip to the kitchen or grocery to buy vegetables - carrots, turnips, potatoes, onions, tomatoes, a soup bone. Cover soup bone with water in a large kettle. Simmer slowly for 2 hours. Peel vegetables cut in small pieces and add to soup bone. Add salt. Cook 40 minutes.

Jello

Making jello is fun. Measuring, mixing, cutting and serving are all important skills to be developed.

Bizcochitos - Mexican Cookies

1 cup sugar	2 cups whole wheat flour
2 cups shortening	1 tsp. salt
1 tsp. anise seed	2 tsp. baking powder
4 cups white flour	3/4 (about) cup water

Cream

Cream lard with hand.
Add sugar; beat until light and fluffy.
Add anise seed and flour which has been sifted with salt and baking powder.
Add just enough water to make mixture hold together.
Roll 1/2" thick and cut into fancy shapes.
Dip in sugar and bake in moderate oven.

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ake in moderate oven.

Bread

1 cup lukewarm water.
Add 1 cake yeast.
Stir until yeast melts. Then add 2 tsp. shortening.
Add 2 T. sugar; stir.
Then add 2 cups flour--be sure dough is very stiff.
Then set in warm place until it doubles itself (about 1 hour).

For more adventurous classes try using this same bread recipe for cinnamon rolls. After dough has risen the first time roll the dough sprinkle with sugar and cinnamon, dot with a small amount of butter, roll, cut, allow rolls to rise and then bake.

There is no end to cooking possibilities in the classroom, -- with just a hot plate preparing rice, dried beans, potatoes or fruit juices becomes an adventure.

Jelly

Put 2 cups grape juice and 3 3/4 cups sugar in large sauce pan.
Mix Well
Bring to boil.
Add 1/2 cup liquid pectin, stirring constantly.
Bring to full rolling boil.
Boil hard 1/2 minute.
Remove from heat; skim.
Pour into 5 jelly glasses.
Cool.

These cooking experiences are not isolated from other phases of the school curriculum. Rather they may enhance and excite learning in many instructional areas.

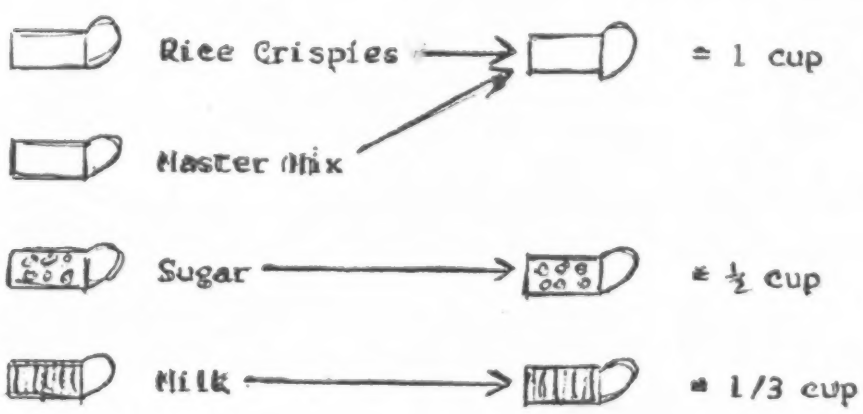
Wacky Cake

Take an ungreased square or oblong cake pan 9 x 13 x 2 and sift into it:

1 c. sugar	then add:
1-1/2 c. flour	1 tsp. vinegar
1/2 tsp. salt	1 tsp. vanilla
1/4 c. cocoa	1/3 c. salad oil
1 tsp. soda	1 c. cold water

Stir this mixture around the pan until there are no lumps. Then bake 30 to 35 minutes in 350 degree oven. Candy mint on top.

Crispy Cookies



Mix crispies, Master Mix and sugar. Add milk and stir. Drop by spoonful on baking sheet. Bake 375 degree oven, 10 to 12 minutes.

Master Mix

To be used for biscuits, griddle cakes, muffins, etc.

9 cups sifted all-purpose flour
1/3 cup baking powder
1 tablespoon salt
2 teaspoons cream of tartar

1 cup nonf
2 cup shor
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Sift toget
Cut in sho
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Biscuits

1 cup of B
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Knead 8-10
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Pudding Co

3/4 cup of
1 pkg. ins
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add:
. vinegar
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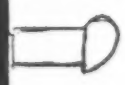
= 1 cup

= ½ cup

= 1/3 cup

and sugar. Add milk
ul on baking sheet.
to 12 minutes.

griddle cakes, muf-

flour

ar

1 cup nonfat dry milk powder
2 cup shortening which does not require refrigeration

Sift together dry ingredients three times. Cut in shortening with pastry blender or two knives until mixture looks like coarse corn meal. Store in covered container at room temperature. NOTE: To measure the master mix, pile it lightly into a cup and level off with a spatula.

Biscuits

1 cup of Bisquick
1/3 cup of milk (mix with fork)

Knead 8-10 times. Place on floured board, pat to 1/2" thick. Dip cutter in flour and cut, place on pan. Heat oven to 450 degrees, bake for 15 minutes.

Pudding Cookies

3/4 cup of Bisquick 1 egg
1 pkg. instant pudding mix, desired flavor.
1/4 cup of vegetable oil

BREAKFAST MENUS

Orders for 50 Children

FIRST WEEK

Dry Cereal with sugar
50 small (individual) boxes
use brand that can be eaten from box

Bananas (cut in half)
5-2/3 pounds

Milk
6-1/2 gallon preferred or
50 individual cartons

Sugar
50 1 teaspoon packages

MONDAY

Sliced Cheese Make open faced sandwiches
3-1/4 pounds

Saltine Crackers
2 pounds

Grapes, seedless
5 pounds

Milk
6-1/2 gallon preferred or
50 individual cartons

TUESDAY

Peanut Butt
3 pounds

Jelly
3-10 ounc

Bread, enri
3-1/4, 1
Make sand

Oranges
2-1/4 doz

Milk
6-1/2 gal
50 indivi

Graham Crac
1-2/3 pou

Carrot Stic
2-1/4 pou

Raisins
4-1/4 pou

Milk, choco
6-1/2 gal
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1-1/2 pou

BREAKFAST MENUS

Orders for 50 Children

FIRST WEEK

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MONDAY

open faced sandwiches

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TUESDAY

<u>Peanut Butter</u> Mix with Jelly
3 pounds

<u>Jelly</u>
3-10 ounce jars

<u>Bread, enriched white</u>
3-1/4, 1 pound loaves
Make sandwiches, cut slices in 1/4's

<u>Oranges</u>
2-1/4 dozen

<u>Milk</u>
6-1/2 gallons preferred or
50 individual cartons

WEDNESDAY

<u>Graham Crackers</u>
1-2/3 pounds

<u>Carrot Sticks</u>
2-1/4 pounds

<u>Raisins</u>
4-1/4 pounds

<u>Milk, chocolate</u>
6-1/2 gallons preferred or 50 individual cartons
1-1/2 pounds instant cocoa mix, add to milk

THURSDAY

Dry Cereal
50 individual packages

Pineapple-Grapefruit juice
1-1/4 #10 can

Milk
6-1/2 gallons preferred or 50 individual cartons

Sugar
50 1-teaspoon packages

FRIDAY

BREAKFAST MENUS

Orders for 50 Children

SECOND WEEK

Dry Cereal
50 individual packages

Orange Juice
1-1/4 #10 can

Milk
6-1/2 gallons preferred or 50 individual cartons

Sugar
50 1 teaspoon packages

MONDAY

Bread, white enriched
3-1/4 1 pound loaves

Butter - cream butt
2/3 pound

Cinnamon - 2 tables

Sugar, granulated -

Fruit Cocktails
6-2/3 #303 cans

Milk
6-1/2 gallons pre
cartons

Dry Cereal - 50 ind

Apples - quartered
6-1/4 pounds

Milk - 6-1/2 gallon
individual carton

Sugar - 50 1 tsp. p

Sliced Cheese - 3-1

Saltine Crackers
2 pounds

Celery Sticks
2-1/3 pounds

Milk, Strawberry
6-1/2 gallons pref
cartons
1-1/2 pounds insta

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ages

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FRIDAY

ST MENUS

50 Children

D WEEK

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MONDAY

es

Butter - cream butter with cinnamon & sugar
2/3 pound

Cinnamon - 2 tablespoons

Sugar, granulated - 3 cups

Fruit Cocktails
6-2/3 #303 cans

Milk
6-1/2 gallons preferred or 50 individual cartons

TUESDAY

Dry Cereal - 50 individual packages

Apples - quartered
6-1/4 pounds

Milk - 6-1/2 gallons preferred or 50 individual cartons

Sugar - 50 1 tsp. pkgs.

WEDNESDAY

Sliced Cheese - 3-1/4 pounds

Saltine Crackers
2 pounds

Celery Sticks
2-1/3 pounds

Milk, Strawberry
6-1/2 gallons preferred or 50 individual cartons
1-1/2 pounds instant strawberry milk mix

THURSDAY

Graham Crackers
1-2/3 boxes

Peanut Butter - mix peanut butter with raisins
3 pounds and make open face sandwiches
and quarter

Raisins
1 pound

Applesauce, red
7 #303 cans; red food color

Milk
6-1/2 gallons preferred or 50 individual cartons

FRIDAY

BREAKFAST MENUS

Orders for 50 Children

THIRD WEEK

Dry Cereal
50 individual packages

Raisins - 1-1/2 pounds

Milk - 6-1/2 gallons preferred or 50 individual cartons

Sugar - 50 1 teaspoon packages

MONDAY

Bread,
3-1/4

Peanut
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Cantalo
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Eggs, h
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peanut butter with raisins
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FRIDAY

AST MENUS

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MONDAY

Bread, brown wheat
3-1/4 1 pound loaves

Peanut Butter and Jelly
See Wednesday Week I

Cantaloupe
6-1/4 cut up and sliced

Milk - 6-1/2 gallons preferred or 50 individual cartons

TUESDAY

Dry Cereal - 50 individual packages

Peaches, slices
4 #2-1/2 cans

Milk - 6-1/2 gallons preferred or 50 individual cartons

Sugar - 50 1 teaspoon packages

WEDNESDAY

Eggs, hardcooked, peeled
4-1/4 dozen

Orange Slices
2-1/4 pounds

Milk - 6-1/2 gallons preferred or 50 individual cartons

THURSDAY

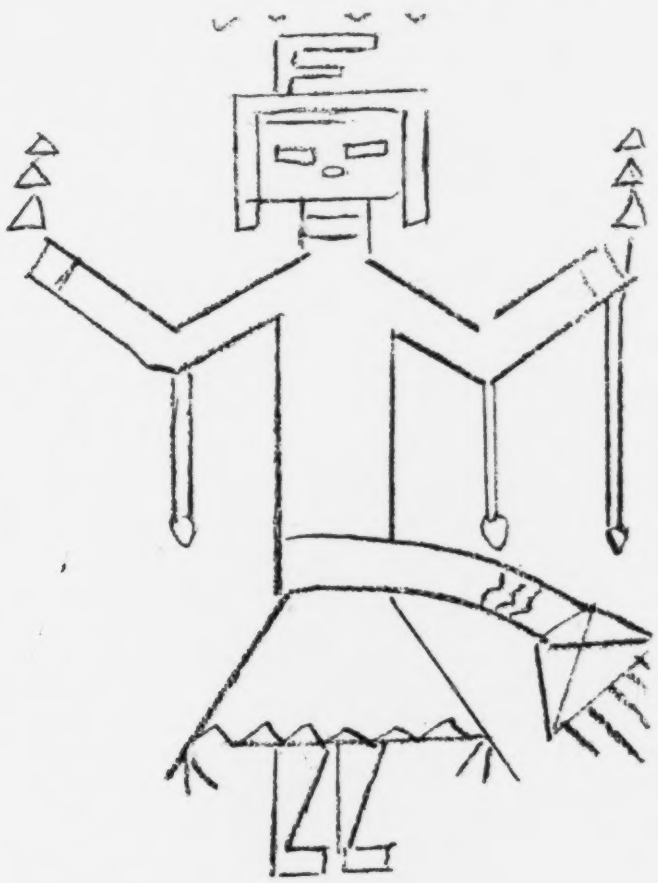
Celery, washed, but not cut
2-1/3 pounds

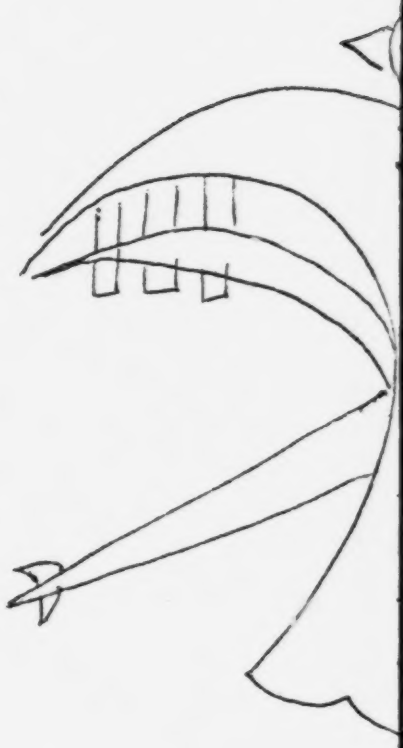
Peanut Butter - used as filling in celery
1 pound

Graham Crackers
1-2/3 pounds

Milk
6-1/2 gallons preferred or 50 individual cartons

FRIDAY





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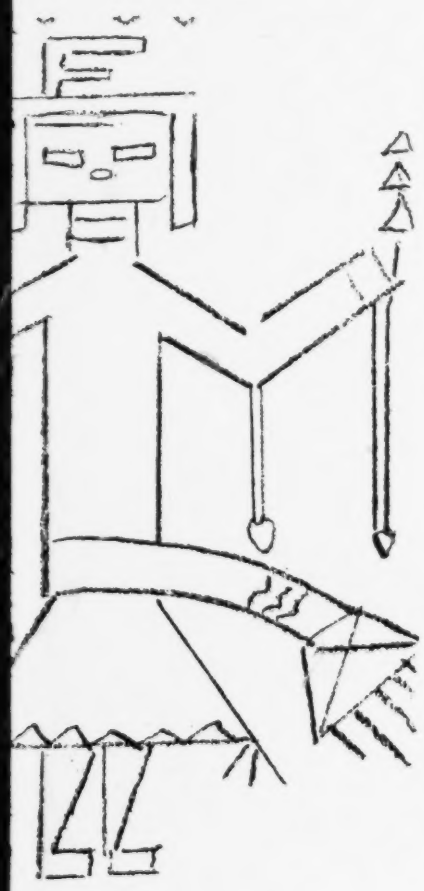

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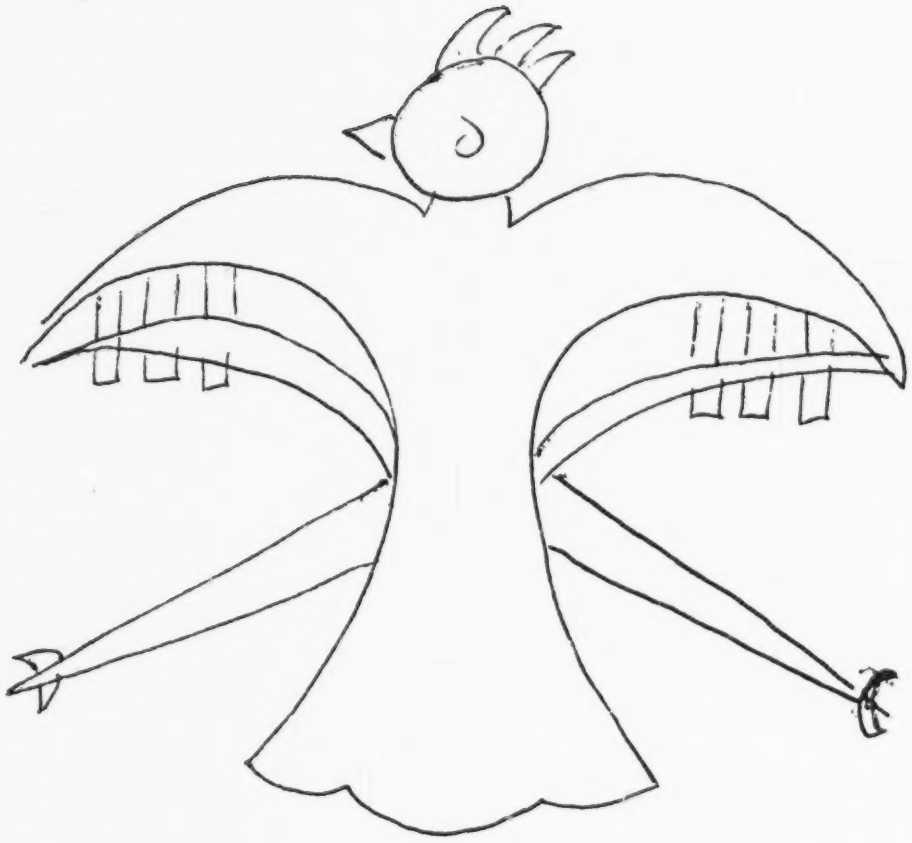

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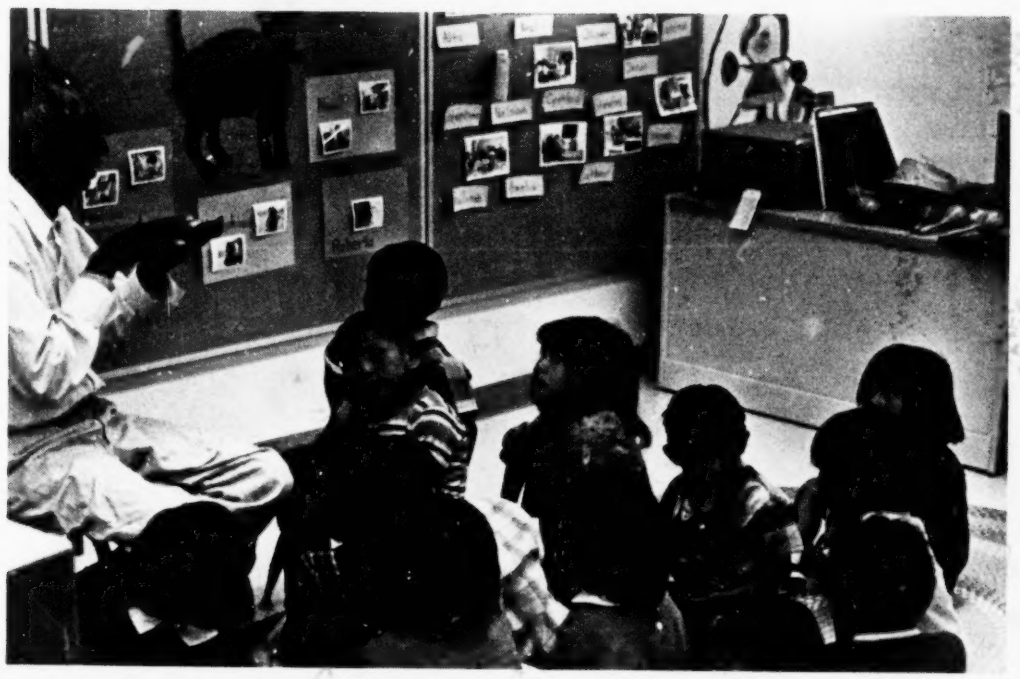
SUPPORTIVE SERVICES



PARENT INVOLVEMENT IN THE KINDER

Both parents and teachers are educators of the child. The child will be aided in achieving the best education of which he is capable when parents and teachers work together, each respectful of the other's indispensable contribution.

Parent involvement in the bilingual kindergarten must become a true partnership of home and school, with two-way responsibility for the education of the young child. "The goal must be to establish a mode of communication and decision making where the outcome is a blend of what parents want and know their children need most and what educators know and understand about children, learning and growth."[1]

The comprehensive kindergarten program involves parents in a way only recently attempted in this country through the Head Start Program. Parent involvement is important because the child's sense of security is rooted in his family and he needs close contact with an emotionally significant adult for varying lengths of time as he moves out to the world of school. The teaching staff can gain from the family information which will assure a smooth transition from home to school. Parents who participate in the early educational programs of their children generally understand better what the school is doing, feel that the school is genuinely interested in their children, and learn ways to help in the educational process.

Since the purpose of the kindergarten program, by its very design, is to assure success in current and future learning, it is important that each parent understand his role in the comprehensive program.

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PARENT INVOLVEMENT IN THE KINDERGARTEN PROGRAM

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The presence of some parents in the classroom each day reminds Indian children that their people are important, that what they have experienced at home is valued, and that Indian life and language will continue. Thus parents can assist the teacher by showing her the importance of certain Indian artifacts, such as the loom for the Navajos, by using the child's first language with him, by sharing information about the local cultural patterns, and by following the teacher's wishes for helping in the classroom.

The teacher and the teacher-assistant can help parents, either singly or in small groups, understand how each is important, i. e., by helping the child move toward self-direction in the classroom. The parent can (1) read or tell stories; (2) carry on individual conversations; (3) make equipment and augment the store-bought play materials with stuffed toys, hobby horses; (4) be an interested fellow eater at breakfast, snack-time, and lunch so that all adults in the classroom eat with small groups of children; (5) accompany the children on the bus to and from school and on field trips; (6) interpret what the child is trying to convey when he speaks in his mother tongue and repeat the thought or word in English if possible

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1 Dr. Barbara Biber - Challenges Ahead for Early Childhood Education, National Association for Education of Young Children, Washington, D. C.

so that the child will be helped in both languages; (7) move into small groups of children as the teacher directs, to supervise, re-direct, or enrich activity.

The parent may not be acquainted with the specialized techniques used by teachers in the schoolroom. The parents' educational efforts are usually more informal and geared to a specific and immediate life situation. Under the guidance of the regular teaching staff, a cadre of parent-teachers can be developed if the staff

1. Recognizes the role of the parent in the child's education,

2. Accepts each parent where he is and helps the parent to perform a role in the classroom which enhances the child's pride in his parent and in himself thereby fostering the child's participation in the classroom process.

By encouraging parents to visit and participate in the kindergarten program, the staff will:

1. Enhance the child's self-concept as he sees a member of his family welcomed by the school.

2. Gain helpful information about the child's early history, including his likes, dislikes, living habits, talents, and desires.

3. Help the parent grow in objectivity as he sees the child in a new setting with a group.

4. Provide an opportunity for the parent to work with other children under staff guidance.

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OBJECTIVES

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5. Facilitate parents' understanding of the task of the school so that the family can join the school in producing another permanent learner.

OBJECTIVES

a. To create an opportunity for the child to see his parents and teachers together.

b. To provide an opportunity for parents to share with the staff their knowledge and hopes about the children's school experience.

c. To involve the parent in the ongoing daily kindergarten program.

d. To incorporate the basic family culture into the planning and implementing of school program.

e. To interpret the activities of the children in the program and to enable the parents to relate to the staff how their children are growing and learning while in school.

EXPERIENCES

1. Make parents feel at home and welcome by providing seating and meaningful jobs.

2. Facilitate participation by providing transportation and interpreters when necessary for parents and other members of the family.

3. Through home visits, formal and informal talking, and sharing information, the teacher learns about the child and his family.

4. Facilitate participation of the parents in the classroom through carrying out special activities such as cooking, reading stories, story telling, making learning materials,* going on field trips with the children, etc.

5. Encourage the parent to bring to school those things which have significant meaning to the child and his family - such as native costumes, arts and crafts, tribal foods, seasonal songs and dramatizations.

6. Plan time for parent and staff to share with one another their mutual concerns. Parents are people who have a variety of interests and needs apart from those of being the parents of a kindergarten child.

7. Plan field trips for and with parents.

8. Plan a community evening in accord with local customs and traditions.

9. Take pictures of children and families.

* Mothers of the Big Cypress Kindergarten children have made doll clothes in typical Seminole patterns for them.

SUPERVISION FOR IMPLEMENTATION OF THE BILINGUAL KINDERGARTEN PROGRAM

Supervision as educational leadership is the concept basic to the role of the principal and the education specialist. Working toward the achievement of agreed upon educational goals is the function of supervision. Constantly searching for better ways to advance the purposes and smooth operation of the kindergarten program makes the role of the supervisor a key one in coordinating and integrat-

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ing all of the facets into the curriculum: Health, Guidance, Social Services, parents and community.

Helping teachers to organize the classroom and think through the many parts of the program is one of the ways the supervisor assists in the initiation of new programs. By maintaining a climate of experimentation, flexibility, and safety to make mistakes the staff is aided in carrying out the new ideas desired in a program. Acceptance of the contributions of the staff as they see need to modify original planning creates opportunities for better feedback and stronger commitment to the program. Involvement of the staff in evaluating the outcomes of the program serves as a basis for further planning and innovations.

New ideas for kindergarten programs seem to take root better if parents and community take part in the original planning. Innovations relating to organization, methods, and content of the curriculum require careful exploration with and explanation to the parents of the young children in the program so that the program's purposes and goals may be fully understood. Involvement of the parents on a continuous basis helps both the community and the staff reach the goals they desire. Principals and education specialists are the key liaison people to bring the staff and parents into necessary and comfortable working relationships.

Supervision has the further task of inspiring staff members to continually develop their skills and their own unique qualities of teaching. Principals and education specialists together with the kindergarten staff develop a program for ongoing education. Important parts of this in-service

program are awareness of new information in regard to content areas, knowledge of new ways of working together, and new concepts in learning theory.

Understanding of the place the content introduced has and the meaning of the activities developed to help the children acquire control over this content in relation to the First Grade becomes a concern of the total staff of the school. Articulating the experiences children may have for learning and growing from Head Start through kindergarten and into the primary grades is of major concern to the principal and total school staff. In-service programs can clarify and enhance the meanings and soundness of the activities proposed.

OBJECTIVES

I. To help initiate a comprehensive bilingual kindergarten program.

II. To assist staff and parents in developing meaningful working relationships.

III To sustain the kindergarten program as it serves children and their parents throughout the year.

IV. To assist teachers in maintaining a balance in the curriculum and incorporate all of the comprehensive services.

V. To develop a significant in-service education program through regular staff meetings. (Daily for kindergarten staff, weekly for groups of teachers, monthly with principal and/or education specialist and intermittently with consultants.)

VI. To assist staff in developing evaluation procedures.

EXPERIENCES

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EXPERIENCES

1. Establish meetings of principal, kindergarten staff, education specialists, selected members of the local community, and parents for initial planning of objectives and scope of program. This group could form the nucleus of a functioning Parent Advisory Committee to formulate policy, e.g. priorities of applicants for kindergarten.

2. Have time prior to opening of school for staff to meet and to plan the opening weeks of school, select specific materials and equipment, organize activity zones in the classrooms and store supplies which are accessible to teachers and to children, outdoors as well as indoors.

3. Arrange for staff and parents of the kindergarten children to meet with representative members of the various components of the comprehensive services (Health, Guidance, and Social Service) prior to the opening of school or shortly after school opens.

4. Involve in the classrooms as visitors or for participation in the program selected community representatives and parents of the kindergarten children. Size of room, teacher's experience in working with parents, and familiarity of the teacher with the native language determines the number of parents that can be absorbed meaningfully and comfortably into the classroom activities on any one day. Establish a "Parent Room" where parents may meet together by themselves, or with invited guests to speak to them; to sew, make dolls and construct

equipment for the kindergarten class; where the teachers may have close contact with the parents.

5. Encourage parents to join class on both short and extended field trips; to supervise small groups of children in work and play activities; read and/or tell stories; and share songs and activities of native culture in both the mother tongue and English.

6. Organize regular meetings of staff and parents to talk about the activities of the program, to analyze the behavior of individual children, to plan for their growth and learning, to incorporate parents' and staff suggestions into the program for experimentation, and to evaluate the effects of the activities on the children's enjoyment of school. Other meetings are planned to discuss ways of helping staff work efficiently together and to resolve interpersonal difficulties.

7. Plan regular staff meeting of kindergarten and primary teachers and assistants to discuss the activities introduced into the kindergarten curriculum to insure articulation and expansion the following year. Share ideas and things-to-do, modify and re-organize the curriculum experiences to enhance children's learning opportunities.

8. Organize regular meetings to include personnel representing the comprehensive services so that staff can use information reported and thus gain insight into how to help children and their families use these services. Arrange for appropriate times to introduce these people into the classroom and to administer services.

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regular meetings to include per- presenting the comprehensive so that staff can use information and thus gain insight into how hildren and their families use vices. Arrange for appropriate introduce these people into the and to administer services.

9. Organize an ongoing in-service program planned cooperatively by principals, education specialists, and staff around the concerns, interests, needs, and problems of the total kindergarten program.

10. Invite consultant help to observe the program and to share with the staff and supervisors new ideas, innovations, and information from results of current research in education and learning theory.

11. Help teachers develop their own unique and personal teaching styles by encouraging experimentation, sharing ideas and feelings with other staff members (set up encounter groups, and individual conference time) encourage attendance at workshops and in-service sessions.

12. Arrange time and have on hand models of evaluation procedures for teachers to analyze and from which to choose what is applicable to their own situations. Encourage teachers to keep 1) information and 2) anecdotal records current on each child so that growth charts may be developed.

SOCIAL SERVICES IN A COMPREHENSIVE EARLY CHILDHOOD KINDERGARTEN PROGRAM

A comprehensive social service program is a family-centered program, not just education for the child. In regard to education, going back to its Latin root, educo means to lead out of the person that which is within him. It does not mean to fill up as one fills up a jug. With this idea in mind, we

can better see education's relatedness to a family-centered program. In such a program the social services should serve as the kind of mortar one puts around bricks to hold them together and thereby construct a wall. Social services are those integrative activities in the kindergarten program which tend to hold the whole wall of family living together, to support it and strengthen it. We see the social services intermingling and bringing together activities of specialists which tend to strengthen the family as a unit: the health needs of the child, the teacher, the community and its concern for the child and his family. The social service needs of the child are in reality community needs. Working with parents in all programs is of highest priority in the social services.

We have a tremendous task in learning about human relations and mental health: the kindergarten program for the child before he enters formal school represents an opportunity for him to learn how to live, how to get along with other people, with his peers, with his parents, with other adults and with those in authority. This requires a sense of self-direction and the self-esteem and sensitivity to others essential to the achievement of positive mental health. This is an area where the social worker can be helpful - getting people to communicate with one another. The social worker can help the staff which is working with children and families to understand each other. Parents are essential in any child development program since it is within the family that the child first learns how to regard himself and develops his own self-image. How people look at him as he joins other groups is related to the image which he developed in his family, an image which he carries as an essential part of his personality.

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It makes no difference how poor or ignorant parents may be, they are his parents, members of his family. The social worker understands this development. Staff must confront this situation and learn to work with parents.

There are other things that are important in terms of social services in a child development program. Graduate professional social workers who have studied subjects about human behavior could be helpful in the development of the curriculum for the daily activities of the children. There are observations about individual children and the small group which would be helpful to the teacher in building the curriculum.

The social worker can serve as a resource person for the staff and come to know more about the families and the community. His knowledge about social and cultural differences can be translated into activities within the kindergarten.

The social worker in planning for the development of the program can help bring about positive human relations on the staff level as well. The social worker can also help in both preservice and in-service training of the social service aides and in training members of staff and volunteers.

Social services make a contribution to one of our primary concerns: Where are we going with these kindergarten programs for young children? The whole meaning of these programs can go back to the Chinese pre-Christian era philosopher, Laotze, who said, "It is when the people can say we have done this ourselves that you really have good leadership." That is where we are going. Social services help people do things for themselves, to learn for themselves skills

by which to live in this complex world. Social service persons and other professionals help with this by training people so that knowledge and wisdom can be a resource for the everyday man and child. Not only are there things that families can do for their children, but they are in a position to teach others these skills. Perhaps we could share our technology and know-how about community services with the common man. Developmental provisions are necessary for growth. Creative leadership must be found to mobilize them for social service.

> Excerpts from statements of Dr. Ira Gibbons, Director, Social Services, Project Head Start OEO at BIA Conference on Early Childhood Education, Albuquerque, New Mexico, March, 1968

DEVELOPING A COMPREHENSIVE SOCIAL SERVICE PROGRAM FOR THE FAMILY

The social service component of the family centered bilingual kindergarten aims to provide experiences which will build strong healthy persons, not only physically but also mentally and emotionally.* This means a plan needs to be developed to guarantee each family member an opportunity to become a helpful, contributing person who contributes to family, school, and community life.

Social service as a family centered activity seeks direction from the community social service agencies. The program would be so designed as to insure aid for families who need help to remedy or alter deficiencies and to lessen pressures and stresses.

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is expanded for the family members to become educational resources for children in the family. In order for such a social service program to evolve from the kindergarten the specific goals are:

1. To promote family interest and understanding of the school goals.
2. To promote family involvement in the education program and activities.
3. To promote school interest in and understanding of family and community goals.
4. To promote community involvement in education ranging from the neighborhood to institutions in the wider community.

OBJECTIVES

I. To promote family interest in understanding of school goals.

II. To promote family involvement in education in the educational program and activities.

III. To promote school interest in and understanding of family and community goals.

IV. To promote community involvement in education ranging from the neighborhood to institutions in the wider community.

EXPERIENCES

1. Plan for a variety of ways in which the parents may assist in the classroom. Refer to section on Parent Involvement.

2. Encourage the teaching staff to work closely with the social worker to be

sure of a clear understanding of each other's roles and objectives so that well-established plans may be made.

3. The social worker should be available to give information to families about community resources and how to use them. He is responsible for referrals and continuity in care when a variety of services are needed. The kindergarten teacher should be informed about the plan for any of the families in her group.

4. The social worker should plan to observe and participate in the kindergarten program so that he knows the child and his family in the school setting as well as at home. This helps the child and parent to know better the social service staff member.

5. Social worker should consult with teaching staff about the individual child's educational, social, and emotional problems and provide information about home conditions and social environment. The teacher also brings information about the child at school and, if she has visited the home, about the home; and together the two plan ways of solving the problem.

6. Social worker should gather and record relevant information about the needs of the children and their families together with the nature of the social service staff activity for providing help. The information should be available to teaching staff and administrators as well as the social service staff members.

7. Social worker should mobilize community resources to provide for adequate housing, food, clothing, and income maintenance

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where these are lacking in the family.

8. Social worker should assess the conditions in the community environment which have implications for the school program. This report shouldbe used for basis of planning the social service program to meet the needs of the family.

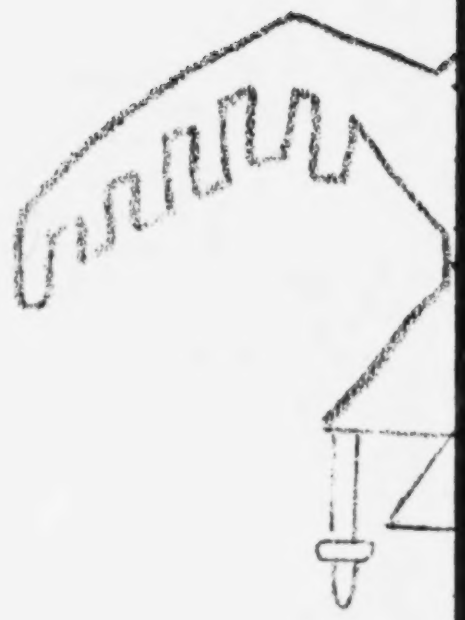
REPORT OF CHILD'S GROWTH

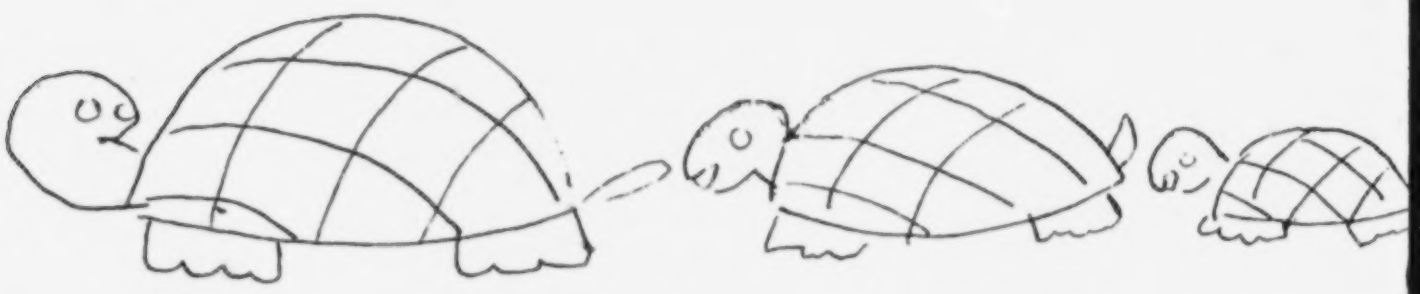
The kindergarten staff has the responsibility for gathering information regarding each child's growth in the classroom. This information may be used as feedback to report to the parents and as a record of the child's growth and development. This information is gained by keeping daily observation records of the child in the classroom. They should reflect as objective a judgment as possible of the way the child seems to behave and use materials and equipment.

The staff should be aware that the way each sees the behavior of others is influenced by how one would like to see others behave and the way he expects others to be. Therefore, when several people keep records, a more objective report is likely to result and each can share what he sees. In an effort to help keep the reports on children as free as possible from the personal feelings of the staff, the following suggestions may be helpful. After reading the statements and questions following, the staff may discuss with one another the possible meansing of each remark and how application is made to the children in the class. As each child is discussed, the different ideas staff members have should be written down. In writing descriptions of the children, it is helpful to record the specific ways in

which they actually do things. Rather than writing descriptions such as "This child is a lovely, friendly child who always tries to please," the staff should try to write concrete behavioral descriptive statements. For example, one might say, "This child seems to withdraw from new activities when they are first introduced, but if an adult apparently coaxes him, he will try to stay at the new activity, but only if someone is close to him to give him encouragement."

Reports on each child should be made and filed at least every three months. Final reports are developed from the quarterly ones and the continuous daily anecdotal records. Periodic evaluations of each child in the classroom will (1) provide feedback information for parents, (2) assess the growth and development of the child during the school year, (3) provide a basis for planning further curriculum experiences and promote growth in learning, and (4) sharpen the observational powers of the teaching staff.





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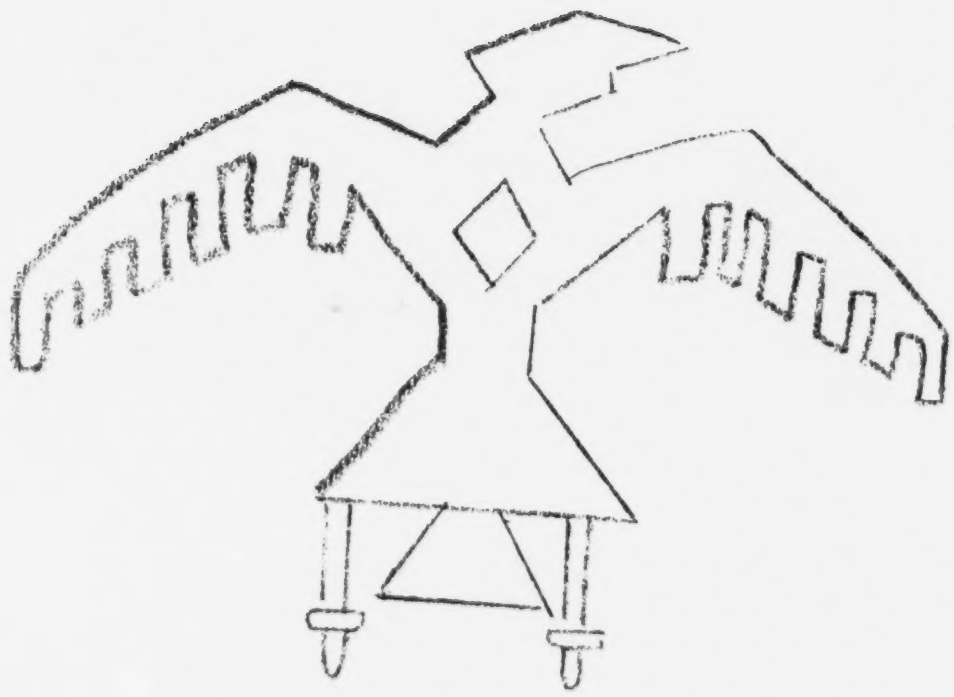

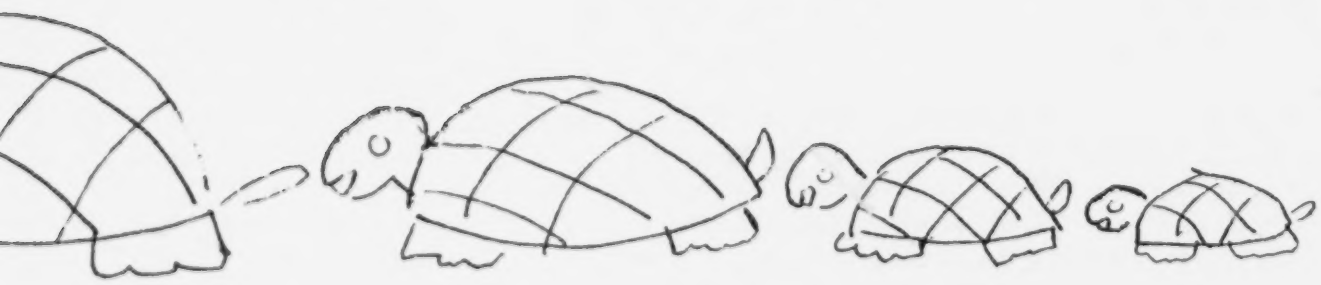

REPORT OF CHILD'S GROWTH

_____Kindergarten____

Report on _____

School Period _____To _____

Days Present _____Days Absent _____

Position in Group (according to age)_____

Description of any handicap:_____

Teacher _____Teacher Assistan

I. Physical Development.

A. Is the child energetic and forceful? Some children seem t
The child who is lacking in vigor has a low energy output.
vigorous child is not necessarily speedy or quick, nor is
The vigorous child performs powerfully and with a display

B. Is the child healthy? Does he have many medical or health
from school frequently for medical reasons? What is the n

C. Does the child see himself as being capable of doing thing
can do or does he view himself as being inferior in physic
the child feel about his own ability to do things physical
his body? Is he typically involved in big-muscle activiti
running, jumping; or in small-muscle activities, such as c
buttoning?

REPORT OF CHILD'S GROWTH

_____Kindergarten_____Date of Report:

_____Birthdate:_____

_____To _____

_____Days Absent _____

(according to age)_____

y handicap:_____ _____

_____Teacher Assistant _____

elopment.

hild energetic and forceful? Some children seem to waste motion and energy.
d who is lacking in vigor has a low energy output. Be sure to note that the
child is not necessarily speedy or quick, nor is he necessarily efficient.
rous child performs powerfully and with a display of energy.

hild healthy? Does he have many medical or health problems? Is he absent
ol frequently for medical reasons? What is the nature of his problems?

child see himself as being capable of doing things which other children
does he view himself as being inferior in physical ability? How does
feel about his own ability to do things physically? How does he use
Is he typically involved in big-muscle activities, such as climbing
jumping; or in small-muscle activities, such as crayoning, pasting, or
?

362

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II. Emotional Development.

A. Is the child cheerful, happy, good-natured, laughi
good sense of humor; or on the contrary, is he mor
tented, unhappy, sad? Disregard the degree to whi
sider the degree to which the child probably enjoy

B. Does the child seem to like to sit close to an adu
wink, or smile?

C. Does the child react emotionally to many and frequ
and quiet?

III. Social Development.

A. Does the child continually seek out the company o
make friendly acceptable advances? His success i
of his friendliness. Friendliness also implies a
to the advances of others.

B. Does the child attempt to dominate social situati
plan the activity of the group? Does he lead? H
to be a leader? Is he a good follower?

C. Does he seem to be fearful of social situations?
hesitant when confronted by changing social situa

IV. Cognitive Development.

A. How well does he know his colors, shapes, numbers
etc.? Does he know his name? How good is his me
from one situation to another situation?

velopment.

hild cheerful, happy, good-natured, laughing, pleased; and does he have a
se of humor; or on the contrary, is he morose, gloomy, depressed, discon-
unhappy, sad? Disregard the degree to which the child pleases you. Con-
e degree to which the child probably enjoys himself.

child seem to like to sit close to an adult? Does he enjoy a hug, pat,
smile?

child react emotionally to many and frequent situations or is he passive
t?

opment.

child continually seek out the company of other children and adults and
endly acceptable advances? His success in such contact is an indication
riendliness. Friendliness also implies an adaptive response on his part
dvances of others.

child attempt to dominate social situations, to take the initiative to
activity of the group? Does he lead? How successful is he in his attempt
leader? Is he a good follower?

seem to be fearful of social situations? Is he apprehensive or shy and
when confronted by changing social situations?

velopment.
does he know his colors, shapes, numbers, directions, such as down, under,
oes he know his name? How good is his memory? Can he transfer his learning
situation to another situation?

364

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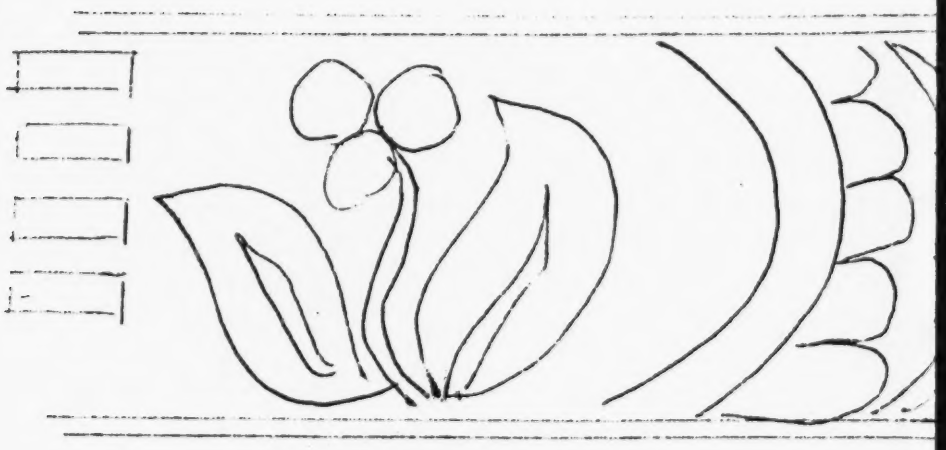
B. Does he stick with a difficul task or does he give up q
difficulty in following simple directions or does he cat
stimulated by new and novel material or does he refrain
in the unfamiliar? How curious is he?

C. Does he react favorably to difficult problem-solving sit
himself from situations which demand intellectual abilit
from the teacher or others? The child's self-concept is
he approaches difficult new material. How does he see
new problems?



ck with a difficult task or does he give up quickly? Does he have
in following simple directions or does he catch on quickly? Is he
by new and novel material or does he refrain from becoming involved
miliar? How curious is he?

ct favorably to difficult problem-solving situations? Does he remove
m situations which demand intellectual ability, or does he seek help
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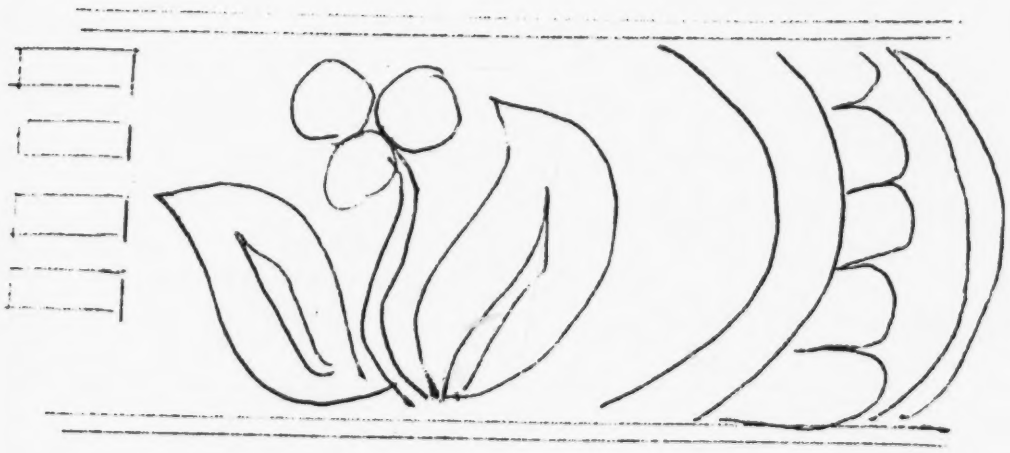
es difficult new material. How does he see himself when faced with
s?



In a comprehensive early childhood education program, the health section should be comprehensive and include numerous activities in which many people participate under the leadership of a health director, preferably the doctor, who will be responsible for the school health program. The following outline of school health services gives some ideas as to the activities and the people involved.

I. Appraisal Aspects

Health history of child and parents obtained from parents by social worker, nurse, teacher. Screening tests such as height, weight, vision, hearing, TB skin test, laboratory tests such as hemoglobin, urinalysis, done by technicians or trained aides.

Medical examination including developmental assessment by physician.

Dental examination by dentist or dental hygienist.

Health assessment of classroom by teaching staff and nurse.

II. Preventive Aspects.

Communicable disease contact. Immunizations by doctor or nurse.

Health check of personnel in contact with children, such as teaching staff, bus driver, and also food handlers.

Suggest health check on family members by social worker or nurse where indicated.

III.

COMPREHENSIVE HEALTH PROGRAM

e early childhood education
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The following outline of
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Safety environment and safety measures in buildings are a responsibility of the school board and must be according to public health regulations. In rooms the teacher should check on the changing environment according to the program.

Proper sanitary facilities are provided by the school under public health regulations.

First aid equipment for injuries and sudden illness, when minor, should be available for the use of the teaching staff.

Plans should be made to take care of serious situations to include transportation to adequate facilities, such as a hospital, by administrative personnel.

Technical assistance and consultation in regard to content and evaluation of health subject matter used in teaching can be obtained from the physician, dentist, dental hygienist, nurse.

III. Remedial Aspects

Follow-up services arranged by social worker, nurse, principal, include correction of remedial defects, and health counseling for child and his family.

BIBLIOGRAPHY

BOOKS

ALMY, Millie, et al., Young Children's Thinking - Teachers Coll
University, N. Y., 1967
" " Ways of Studying Children - " "
, 1959

ASHTON, Warner, Sylvia, Teacher - Simon and Schuster, N. Y. 196

Association for Childhood Education, International - Feelings a
Washington, D. C. 1965

BERNARD, Harold, W. and HUCKINS, Wesley C., Readings in Human D
Bacon, Inc. 1967

BIBER, Barbara - Challenges Ahead for Early Childhood Education
Play is Growth, Bank Street College of Educati

BRIM, O. G. Jr., Education for Child Rearing - Russell Sage Fou

CHUKOVSKY, Kornei, From Two to Five - Revised edition, Universi
California, 1968

CHOEN, Dorothy and STERN, Virginia, Observing and Recording the
Children - Teachers College Press, Columbia University, N.

COMBS, Arthur, W., The Professional Education of Teachers - All
Mass., 1965

Department of Elementary School Principals, National Education A
School Years, N.E.A., 1960

D'EVELYN, Katherine, Individual Parent-Teacher Conference - Bur
Teachers College, Columbia University, N. Y., 1945

ENGEL, Rose C., Language Motivating Experiences for Young Childr
Los Angeles, California, 1968

ERIKSON, E. H., Childhood and Society - Norton Co., N. Y., 1967

FREIBERG, Selma, The Magic Years - Charles Scribner's Sons, N. Y

BOOKS

l., Young Children's Thinking - Teachers College Press, Columbia
. Y., 1967
Ways of Studying Children - " " " "
" , 1959

lvia, Teacher - Simon and Schuster, N. Y. 1963

ildhood Education, International - Feelings and Learnings - A.C.E.I.,
. C. 1965

. and HUCKINS, Wesley C., Readings in Human Development, Allyn and
1967

hallenges Ahead for Early Childhood Education, N A E Y C, 1969
lay is Growth, Bank Street College of Education

ducation for Child Rearing - Russell Sage Foundation, N. Y., 1959

From Two to Five - Revised edition, University of California Press,
968

STERN, Virginia, Observing and Recording the Behavior of Young
achers College Press, Columbia University, N. Y., 1958

The Professional Education of Teachers - Allyn and Bacon, Boston,

entary School Principals, National Education Association - Those First
N.E.A., 1960

e, Individual Parent-Teacher Conference - Bureau of Publications,
ege, Columbia University, N. Y., 1945

nguage Motivating Experiences for Young Children - D.F.A. Publishers,
California, 1968

ildhood and Society - Norton Co., N. Y., 1967

he Magic Years - Charles Scribner's Sons, N. Y., 1959

GARDNER, Bruce, The Development of the Pre-School Child

GOODLAD, John, School Curriculum and the Individual - Blais

GORDON, Ira J., Studying the Child in School - John Wiley a

GULLEY, H. E., Discussion, Conference and Group Processes,

GWYNN, J. Minor, Theory and Practice of Supervision - Dodd,

HAMLIN, Ruth, et al, Schools of Young Disadvantaged Childre
N. Y., 1967

HARRINGTON, M., The Other America - Penquin Books, Baltimor

HARTLEY, R. Frank L. and GOLDENSON, R., Understanding Child
versity Press, N. Y., 1952

HARTUP, Willard and SMOTHERGILL, Nancy (editors), The Young
National Association for Education of Young Children, W

HEFFERNAN, Helen and TODD, Vivian, The Kindergarten Teacher

HYMES, James L. Jr., Teaching the Child Under Six - Charles
Columbus, Ohio, 1968

HYMES, James L. Jr., Effective Home - School Relations - Pr

HOLLANDER, H. Cornelia, Portable Workshop for Preschool Tea
Inc., Garden City, N. Y., 1966

JENKINS, Gladys, et al, These Are Your Children - 3rd editi
Chicago, Ill., 1966

LANE, Howard and BEAUCHAMP, Mary, Understanding Human Devel
New Jersey, 1959

LANE, Mary B. (editor), On Educating Human Beings - Follett
Illinois, 1964

LANGDON, Grace and STOUT, I. W., Teacher-Parent Interviews

evelopment of the Pre-School Child

Curriculum and the Individual - Blaisdell Pub., Waltham, Mass.

ing the Child in School - John Wiley and Sons, Inc., 1966

sion, Conference and Group Processes, Henry Holt & Co., N.Y., 1966

ry and Practice of Supervision - Dodd, Mead and Co., N. Y., 1961

Schools of Young Disadvantaged Children - Teachers College Press,

ther America - Penquin Books, Baltimore, Md., 1964

nd GOLDENSON, R., Understanding Children's Play - Columbia Uni-
Y., 1952

OTHERGILL, Nancy (editors), The Young Child; Reviewsof Research -
ion for Education of Young Children, Washington, D. C., 1967

ODD, Vivian, The Kindergarten Teacher, revised edition

Teaching the Child Under Six - Charles E. Merrill Pub. Co.,
1968

Effective Home - School Relations - Prentice-Hall, Inc., 1953

, Portable Workshop for Preschool Teachers - Doubleday and Co.,
, N. Y., 1966

, These Are Your Children - 3rd edition - Scott, Foresman & Co.,
966

HAMP, Mary, Understanding Human Development - Prentice-Hall, Inc.

, On Educating Human Beings - Follett Publishing Co., Chicago,

UT, I. W., Teacher-Parent Interviews - Prentice-Hall, Inc., N.Y. 1954

LEEPER, Sarah Lou, et al, Good Schools for Young Children, 2nd editi
N. Y., 1968

LEONARD, Edith M., VANDEMAN, D. and MILES, L., Counselling With Pare
Hood Education - MacMillan Co., N. Y., 1954

National Society for the Study of Education, Behavioral Science and
istration - Part II, 63rd yearbook, Chicago, Ill., Univ. of Cali

OSBORNE, Ernest, The Parent-Teacher Partnership - Teachers College P
Columbia Univ., N. Y. 1959

PHILLIPS, J. L. Jr., The Origins of Intellect, Piaget's Theory - W.
pany, 1969

RUDOLPH, M. and COHEN, D., Kindergarten - A Year of Learning - Apple
N. Y., 1964

SHARP, George, Curriculum Development as Re-Education of Teachers,
tions Teachers College, Columbia University, N. Y. 1951

STONE and CHURCH, Childhood and Adolescence, Random House, 1968

HISTORY AND CULTURE BOOKS

1. The American Heritage, Book of Indians
New York, Simon & Schuster 1961

2. Indian Art of the American
Leroy H. Appleton
New York, Scribners & Co., 1950

3. Race, Language and Culture
Franz Boaz, New York
MacMillan, 1949

4. Fort Hall
Jennie B. Brown
Calwell-The Caxton
Printers Ltd., 1932

5. Education fo
Chilocco Bur
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6. Indians of t
John Collier
W. W. Norton

7. Blackfeet Cr
John C. Ewer
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8. The Five Civ
Grant Forema
University o

al, Good Schools for Young Children, 2nd edition - MacMillan Co.,

DEMAN, D. and MILES, L., Counselling With Parents in Early Child-
MacMillan Co., N. Y., 1954

he Study of Education, Behavioral Science and Educational Admin-
II, 63rd yearbook, Chicago, Ill., Univ. of California Press, 1964

Parent-Teacher Partnership - Teachers College Bureau of Publication,
. Y. 1959

The Origins of Intellect, Piaget's Theory - W. H. Freeman and Com-

D., Kindergarten - A Year of Learning - Appleton Century Crafts,

ulum Development as Re-Education of Teachers, Bureau of Publica-
llege, Columbia University, N. Y. 1951

ldhood and Adolescence, Random House, 1968

HISTORY AND CULTURE BOOKS

tage, Book of Indians
Schuster 1961

American

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32

5. Education for Cultural Change
Chilocco Bureau of Indian Affairs
Chilocco Indian School, 1953

6. Indians of the Americans
John Collier, New York
W. W. Norton Co., 1947

7. Blackfeet Crafts
John C. Ewers, Lawrence
Bureau of Indian Affairs
Haskell Institute Press, 1945

8. The Five Civilized Tribes
Grant Foreman, Newman
University of Oklahoma Press

9. Nez Perce: Tribesman of the Columbia Plateau
F. D. Haines, Newman
University of Oklahoma, 1955

10. The Navajo
J. A. King
Section of the Interior, 1948

11. The Peyote Cult
Weston LaBarre
New Haven, Yale Univ. Press, 1938

12. Art and Indian Children
Curriculum Bulletin No. 7, Institute of American Indian Arts, Santa Fe, N.M., 1970

13. The Book of American Indians
R. B. Raphael

14. Modern Indians
Dr. J. F. Bryde

15. The Legends of the Mighty Sioux
Obtain from Young Citizens of the Department of Public Instruction sponsored by The University of South Dakota.

PAMPHLETS

From:

1. Association for Childhood Education International
3615 Wisconsin Avenue, N.W.
Washington, D. C. 20016

Bits and Pieces - Imaginative Uses for Children's Learning

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HLETS

Childhood Education In-

venue, N.W.
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aginative Uses for Chil-

Children and Oral Language (joint committee) of ACEL;ASCD; I.R.A.; N.C.T.E.

Don't Push Me!

Equipment and Supplies

Housing for Early Childhood Education: Centers for Growing and Learning

How Good Is Our Kindergarten?

Implications of Basic Human Values for Education

Play - Children's Business

Toward Better Kindergartens

From:

2. Association for Supervision and Curriculum Development
   1201 Sixteenth Street, N. W.
   Washington, D. C.

Leadership for Improving Instruction (Yearbook)

Organizing for Improved Instructions

Role of Supervision and Curriculum, Director in a Climate of Change (Yearbook)

Supervision in Action

Using Current Curriculum Development

From:

3. Bank Street Publications
69 Bank Street
New York, New York

Hochman, V. and Greenwald, H. Science Experiences in Early Childhood Education

Gilkeson, Elizabeth C. Let's Talk About Our Children

Johnson, Harriet The Art of Blockbuilding

Packet for Parents
Packet for Nursery School Teachers
Packet (second) for Nursery School Teachers

From:

4. Bureau of Indian Affairs
Department of Interior
U. S. Government
Washington, D. C. 20242

Indians of the Gulf Coast
Indians of North Carolina
Indians, Eskimos and Aleuts of Alaska
Indians of Montana and Wyoming
Indians of the Dakotas
Indians of Eastern Seaboard

Early Childhood Education for American Indians - Proceedings of a conference on Early Childhood Education for American Indians, March 5-7, 1968 at the University of New Mexico, Albuquerque, New Mexico

From:

5. National A
of Young
1834 Conne
Washington

Lady Allen of
Lady Allen of

Baker, Katheri

Beyer, Evelyn
Teacher-Parent

Friedman, Davi
as Play Materi

Haupt, Dorothy
Nursery School

Jones, Betty J.
Children?

From:

6. National Da
Chicago, Il

Feeding Little

Food for Young

From:

7. National Ed
Department
Nursery Ed
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Wyoming

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conference on Early
American Indians,
University of New
w Mexico

From:

5. National Association for the Education of Young Children
1834 Connecticut Avenue, N. W.
Washington, D. C. 20009

Lady Allen of Hurtwood - Play Parks
Lady Allen of Hurtwood - Space for Play: The Youngest Children

Baker, Katherine Read - Let's Play Outdoors

Beyer, Evelyn - Sharing - A New Level in Teacher-Parent Relationships

Friedman, David, et al. Water, Sand and Mud as Play Materials

Haupt, Dorothy - Science Experiences for Nursery School Children

Jones, Betty J. - What Is Music for Young Children?

From:

6. National Dairy Council
Chicago, Illinois 60606

Feeding Little Folks

Food for Young Children

From:

7. National Education Association
Department of Elementary, Kindergarten, Nursery Education
1201 Sixteenth St., N. W.
Washington, D. C.

Blockbuilding

Kindergarten Education

From:

8. Office of Child Development, HEW
   Project Headstart
   Washington, D. C.

Rainbow Series of Pamphlets Project Head Start

Beautiful Junk - (a book of ideas for pre-school equipment)

From:

9. Child Development Group of Mississippi
   (O.E.O.)
   Jackson, Mississippi

From the Ground Up - a book of ideas for pre-school equipment

From:

10. Science Research Associates
    259 East Erie Street
    Chicago, Illinois

Grant, Eve. H. Parents and Teachers as Partners

Piers, Marie - How to Work With Parents

From:

11. Educational Resources Information Center
    U. S. Department of Health, Education
    and Welfare: Office of Education
    Washington, D. C. 20202

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Educating Children in Nursery Schools and Kindergartens

Educating Disadvantaged Children Under Six

Facts About Nutrition

Health Auxiliaries in the Indian Health Program

Your Child from 1 to 6

ADDRESSES FOR ADDITIONAL RESOURCE MATERIAL

1. Children's Bureau, Office of Child Development, Department of Health, Education and Welfare.
   Washington, D. C.

2. Child Study Association of America
   9 E. 89th Street
   New York, New York

3. David Cook & Company - Publishers
   850 N. Grove Avenue
   Elgin, Illinois 60120

4. Merrill Palmer Institute
   71 Terry Avenue
   Detroit, Michigan

5. Metropolitan Life Insurance Company
   1 Madison Avenue
   New York, New York 10010

6. Play Schools Association
   120 W. 57th Street
   New York, New York

7. Public Affairs Pamphlets
   22 E. 38th Street
   New York, New York

8. Society for Visual Education
   1345 Diversey Parkway
   Chicago, Illinois 60614

9. Your State Department of Education.

FILMS

The following films are available, on a free-loan basis,
Talking Pictures Service, Inc.

DISCIPLINE AND SELF-CONTROL B/W, 25 min.

This film discusses the problem of discipline as one of
children. The film shows how a teacher can establish co
vent disciplinary problems; discusses adequate supervisi
der control, and shows how to help a child accept contro

ORGANIZING FREE PLAY B/W, 22 min.

This film focuses on the facet of early childhood educat
school children and their teachers in the physical surro
film discusses these questions: What is free play? How
How does one control free play? An excellent training f
AUDIENCE GUIDE highlighting the meaning of "free play" a
ordered in quantity with the film through Modern Talking
DISCUSSION GUIDE AND PROGRAM MANUAL, designed exclusivel
develops in detail the salient points of "free play" phi
with or without the film and may be ordered from The Off
Washington, D. C. 20201

HEAD START TO CONFIDENCE B/W, 20 min.

The film illustrates the vital need for every child to h
and worth as a person. It shows a teacher's various mea
preschool children through controlled achievement, langu
Spanish translation available. AUDIENCE GUI S, in bulk
quest. A DISCUSSION GUIDE AND PROGRAM MANUAL, to be use
developed for program directors and/or discussion leade
Development, HEW, Washington, D. C. 20201

JENNY IS A GOOD THING Color, 18 min.

Head Start's newest film release. Dramatically shows o
cepts -- that the Nutrition program plays a major role a
activities in a quality Head Start center. A film for t
the best examples of the child teaching process to the c
Lancaster. Title song, "Jenny", an original music score
Mary music fame.

FILMS

ms are available, on a free-loan basis, through the libraries of Modern Service, Inc.

LF-CONTROL B/W, 25 min. MTP #9055

es the problem of discipline as one of teaching and living with young lm shows how a teacher can establish control in a friendly climate and pre- problems; discusses adequate supervision, and the dangers of over and un- shows how to help a child accept control.

LAY B/W, 22 min. MTP #9053

on the facet of early childhood education called Free Play. Using pre- nd their teachers in the physical surroundings of the nursery school, the ese questions: What is free play? How do children learn from free play? rol free play? An excellent training film, also available in Spanish. An ghlighting the meaning of "free play" as a curriculum of discovery may be ty with the film through Modern Talking Picture Service, Inc. The new AND PROGRAM MANUAL, designed exclusively for the use of discussion leaders, l the salient points of "free play" philosophy. It is recommended for use he film and may be ordered from The Office of Child Development, HEW, 20201

NFIDENCE B/W, 20 min. MTP #9054

tes the vital need for every child to have a sense of his own importance erson. It shows a teacher's various means of building the self-confidence of en through controlled achievement, language and performance of useful tasks. on available. AUDIENCE GUIDES, in bulk, will be sent with the film upon re- SION GUIDE AND PROGRAM MANUAL, to be used with or without the film, has been ogram directors and/or discussion leaders. Please order from Office of Child , Washington, D. C. 20201

THING Color, 18 min. MTP # 9273

est film release. Dramatically shows one of Head Start's most important con- e Nutrition program plays a major role and is an integral part of the daily quality Head Start center. A film for training staff members and introducing s of the child teaching process to the community at large. Narrated by Burt e song, "Jenny", an original music score by Noel Stookey, of Peter, Paul and

A Leader's Discussion Guide (Rainbow Series #3E) accompanies the
structions on discussion techniques, insights into the full sign
trition program, and suggesting questions to use in discussing t
is part of the total Nutrition Kit and also may be ordered in bu
Start, 1200 19th Street, N. W., Washington, D. C., 20506. Atten
Film also available in Spanish.

Addresses of Modern Talking Service Film Libraries, for ordering

Atlanta, Georgia 30308
714 Spring Street, N.W.
Mr. Thomas L. Gunter
875-5666
Area code 404

Cedar Rapids, Iowa 52404
c/o Pratt Educational Media, Inc.
200 Third Avenue, S. W.
Mrs. Louise Nordstrom
363-8144
Area code 319

Charlotte, North Carolina 28202
503 North College Street
Mr. Max Austin
377-2574
Area code 704

Chicago, Illinois 60611
160 E. C and Avenue
Mr. William Gallagher
467-6470
Area code 312

Detroit, Michigan 48235
15921 W. 8 Mile Road
Mr. Kermit Cable
273-2070
Area code 313

Los Angeles, Ca
1145 N. McCadde
Mr. Harry Sanfo
469-8282
Area code 2

Milwaukee, Wisc
c/o Roa's Films
1696 North Asto
Mrs. Roa K. Bir
271-0861
Area code 4

Minneapolis, Mi
9129 Lyndale Ave
Mr. Cairan Eige
884-5383
Area code 6

San Francisco, C
16 Spear Street
Mr. William Schw
982-1712
Area code 41

Seattle, Washing
c/o Rarig Presen
2100 North 45th
Mrs. E. A. Rarig
633-3878
Area code 20

ion Guide (Rainbow Series #3E) accompanies the film, presenting clear in-
ussion techniques, insights into the full significance of Head Start's Nu-
nd suggesting questions to use in discussing the film itself. The Guide
al Nutrition Kit and also may be ordered in bulk through Project Head
treet, N. W., Washington, D. C., 20506. Attention: Miss Sue Sadow.
e in Spanish.

n Talking Service Film Libraries, for ordering:

0308
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Los Angeles, California 90038
1145 N. McCadden Place
Mr. Harry Sanford
469-8282
Area code 213

52404
hal Media, Inc.
S. W.
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Milwaukee, Wisconsin 53202
c/o Roa's Films
1696 North Astor Street
Mrs. Roa K. Birch
271-0861
Area code 414

arolina 28202
Street

Minneapolis, Minnesota 55420
9129 Lyndale Avenue, S.
Mr. Cairan Eigen
884-5383
Area code 612

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ner

San Francisco, California 94105
16 Spear Street
Mr. William Schweizer
982-1712
Area code 415

8235
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Seattle, Washington 98103
c/o Rarig Presentation Services, Inc.
2100 North 45th Street
Mrs. E. A. Rarig
633-3878
Area code 206

Washington, D. C. 20036
Suite 4, 2000 "L" St., N. W.
Mrs. Maria Denis
659-9234
Area code 202

Omaha, Nebraska 68102
c/o Modern Sound Pictures, Inc.
1410 Howard Street
Mr. Keith T. Smith
341-8476
Area code 402

Philadelphia, Pennsylvania 19107
1234 Spruce Street
Mrs. E. H. Dunn
545-2500
Area code 215

The following films are available on a free-loan basis f
Washington, D. C.

BLOCKS.....A MEDIUM FOR PERCEPTUAL LEARNING

The second in a series of training films for teachers o
film focuses on the perceptual learnings that are inhere
derived from how the child perceives the blocks with wh
he builds. (Source: Campus Film Productions, New York

LEARNING THROUGH THE ARTS

The film shows experiences with language arts, response
use of paint and clay. It shows how discovery and expre
natural and joyous part of life of the young child. (S
Robertson Blvd., Los Angeles, California)

GUIDING BEHAVIOR

Teachers deal with common developmental problems of 3,
Churchill Films)

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ctures, Inc.

ylvania 19107

are available on a free-loan basis from BIA Central Office, Education,

A MEDIUM FOR PERCEPTUAL LEARNING 17 min.

ies of training films for teachers of early childhood education. The perceptual learnings that are inherent in block building and which are e child perceives the blocks with which he works and the space in which : Campus Film Productions, New York City, N. Y.)

E ARTS 22 min.

riences with language arts, response to music and rhythm, imaginative ay. It shows how discovery and expression through the arts can be a part of life of the young child. (Source: Churchill Films, 662 N. s Angeles, California)

20 min.

common developmental problems of 3, 4 and 5 year olds. (Source:

SETTING THE STAGE FOR LEARNING 22 min.

Pictures equipment and simple "props" - arranged for many kinds of le
Churchill Films)

LITTLE WORLD 20 min.

Shows how a child development cent r looks and operates, the necessar
days program in action. (Source: Health and Welfare Materials Cente

Available from McGraw Hill, 333 W. 42 St., New York, N. Y., for $15.0

A CHANCE FOR CHANGE 30 min.

Shows how a community built a strong child development center using t

OTHER SOURCES OF FILMS

Educational Film Guide (annually)
H. W. Wilson & Co.
950 University Avenue
New York, New York

Educators Guide to Free Films
Educators Progress Service
Randolph, Wisconsin

Dairy Council of Californi
Imperial and San Diego Cou
4604 University Avenue
San Diego, California 921

Selected Films in Child Li
Department of Health, Educ
and Welfare
Washington, D. C.

Superintendent of Document
U. S. Government Printing
Washington, D. C.

RNING 22 min.

mple "props" - arranged for many kinds of learning. (Source:

20 min.

ment center looks and operates, the necessary equipment, a typical
(Source: Health and Welfare Materials Center, New York City, N.Y.)

1, 333 W. 42 St., New York, N. Y., for $15.00 rental:

30 min.

lt a strong child development center using their natural resources.

nnually)

Dairy Council of California
Imperial and San Diego Counties
4604 University Avenue
San Diego, California 92105

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Selected Films in Child Life
Department of Health, Education
and Welfare
Washington, D. C.

Superintendent of Documents
U. S. Government Printing Office
Washington, D. C.

ACKNOWLEDGEMENTS

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Special Consultants, serving on training staffs of the National Ass
Children, in 1968 and 1969 and of the Bank Street College of Educat
consultants:

National Indian Education Advisory Committee

Mr. Ted George
Clallam
Washington State

Mr. Domingo Montoya
Pueblo
New Mexico

Mr. Frank Ducheneaux
Sioux
South Dakota

Mr. John Woodenlegs
Cheyenne
Montana

Mr. Overton James
Chickasaw
Oklahoma

Mr. Dan Hohahni
Hopi
Arizona

Indian Resource Consulta

Mr. Clyde Beyal
Navajo
Tohatchi, New Mexico

Mr. Franklin Dreadfulwat
Cherokee
Tahlequah, Oklahoma

Mrs. Irene Gronau
Sioux
Sisseton, South Dakota

Mrs. Jennie M. Holmes
San Dia
Alameda, New Mexico

Mrs. Anna Kipling
Blackfoot
Browning, Montana

Mrs. Eunice Larrabee
Sioux
Lantry, South Dakota

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ucation
ee

Indian Resource Consultants

Mr. Clyde Beyal
Navajo
Tohatchi, New Mexico

Mrs. Otellie Lolama
Hopi
Santa Fe, New Mexico

a

Mr. Franklin Dreadfulwater
Cherokee
Tahlequah, Oklahoma

Mrs. Connie Madrigal
Seminole
Okachobee, Florida

ux

Mrs. Irene Gronau
Sioux
Sisseton, South Dakota

Mr. Eddie Mike
Navajo
Shiprock New Mexico

s

Mrs. Jennie M. Holmes
San Dia
Alameda, New Mexico

Miss Ida Nicori
Kwethluk
Alaska

Mrs. Anna Kipling
Blackfoot
Browning, Montana

Mr. Vincent E. Randall
Apache
Clarkdale, Arizona

Mrs. Eunice Larrabee
Sioux
Lantry, South Dakota

Mrs. Lillian Rhoades
Pima
Scottsdale, Arizona

Indian Resource Consultants
(continued)

Mr. Richard Servilican
Apache
Fort Apache, Arizona

Mr. Paul Tisi
Navajo
Tuba City, Arizona

Mrs. Chabah D. Watson
Navajo
Window Rock, Arizona

Mrs. Mildred Young
Sioux
Pine Ridge, South Dakota

Training Program Specialists and Special Consultants and Other Special Consultan

Miss Hazel Anderson
California

Mr. Lewis Ballard
New Mexico

Dr. Bernice Borgman
Michigan State Univ.

Mrs. Elizabeth Brady
California

Dr. Courtney Cazden
Harvard Univ., Mass.

Dr. Laura Dittman
Univ. of Maryland

Dr. Robert Egbert
Director
Follow Through, OEO, OE
Washington, D. C.

Mrs. Barsha Elzey
Home Economist
California

Mr. Freeman Elzey
San Francisco State College
California

Dr. Richard Endsley
Univ. of Georgia

Mrs. Matti Feldman
Bank Street College of Education
New York

Dr. Bruce Gardner
Univ. of Denver

Dr. Ira Gibbons
Chief, Social Services
Head Start, OEO
Washington, D. C.

Dr. Felix Hertado
Indian Health Service
Albuquerque, New Mexico

Dr. Gertrude Hunter, Chief
Health Services
Head Start, OEO
Washington, D. C.

Dr. Vera John
Yeshiva Univ.
New York

Dr. Mary B. Lane
San Francisco State College
California

Mrs. Stella Lee
Navajo Reservation

Miss Dorothy Levens
Vassar College
New York

Training Program Specialists and Special Consultants and Other Special Consultant
(continued)

Mrs. Mary Lewis
San Francisco State College
California

Miss Ethel Macintyre
National College
Illinois

Dr. Francis McKinnley
Indian Education Project
Far West Lab
Berkeley, California

Mrs. Phyllis Nye
State Department Welfare
New Mexico

Mr. Harvey Pamella
Head Start
Arizona State Univ.

Miss Anne Rainer
Taos, New Mexico

Dr. Angel Reaud, Chief
Community Health
Indian Health Service
Bethesda, Maryland

Mrs. Rachel Rippey
Bank Street College of Education
New York

Mr. Wilbur Rippey
Bank Street College of Education
New York

Mrs. Marguerita Rudolph
New York

Dr. Blanche Saia
Bank Street College of Education
New York

Dr. Mildred Sabath
California State College

Mrs. Miriam Stecher
Bank Street College of Education
New York

Dr. Helen Van Alstine
Vassar College
New York

Miss Charlotte Wheeler
Univ. of Illinois

Mrs. Docia Zavitkovsky
Children's Center
Santa Monica, California

Mrs. Pearl Zeitz
Bank Street College of Education
New York